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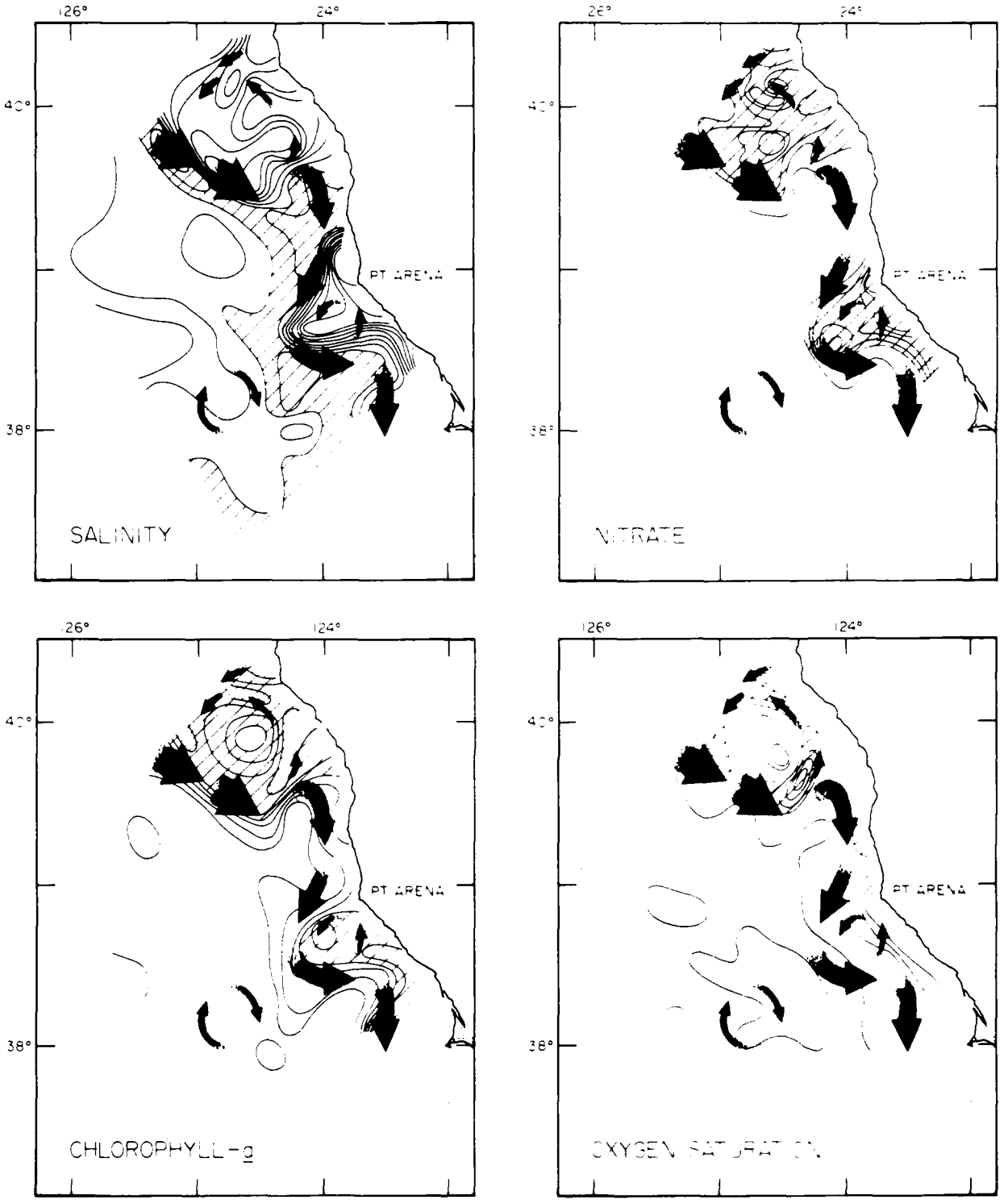
The data in this report were collected on Cruise SQ87 Legs I, 28 April to 13 May, and II, 14 to 23 May 1987, aboard RV New Horizon of the Scripps Institution of Oceanography (SIO). This cruise was part of the Coastal Transition Zone (CTZ) program (The CTZ Group, 1988). The CTZ program was aimed at understanding the causes and consequences of the physical, chemical and biological structure in the CTZ region with particular emphasis upon the cold filaments which are often seen in satellite images. This was a multi-investigator, multi-institution program. Several other cruises were conducted in the coastal region of Northern...



PHYSICAL, CHEMICAL AND BIOLOGICAL DATA REPORT

CRUISE SQ87

28 April-23 May 1987

SIO Reference 90-33
1 December 1990

UNIVERSITY OF CALIFORNIA, SAN DIEGO

SCRIPPS INSTITUTION OF OCEANOGRAPHY

LA JOLLA, CALIFORNIA 92093

PHYSICAL, CHEMICAL AND BIOLOGICAL DATA

CRUISE SQ87

28 APRIL - 23 MAY 1987

T.L. Hayward, A.W. Mantyla, P.P. Niiler and K.M. Plummer

Sponsored by

Office of Naval Research

and

Marine Life Research Group,

Scripps Institution of Oceanography

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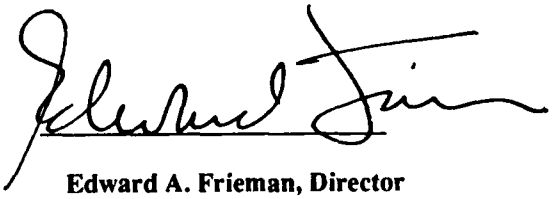

Edward A. Frieman, Director

CONTENTS

Cover Illustration: Horizontal property distributions shown with an artist's interpretation of the flow field.

INTRODUCTION

The data in this report were collected on Cruise SQ87 Legs I, 28 April to 13 May, and II, 14 to 23 May 1987, aboard RV New Horizon of the Scripps Institution of Oceanography (SIO). This cruise was part of the Coastal Transition Zone (CTZ) program (The CTZ Group, 1988). Data collection and processing were jointly sponsored by the Office of Naval Research and the Marine Life Research Group (MLRG) of SIO. Technical assistance in data collection and processing was provided by technicians in MLRG, the Oceanographic Data Facility (ODF) and the Physical Oceanography Research Division, all of SIO.

The CTZ program was aimed at understanding the causes and consequences of the physical, chemical and biological structure in the CTZ region with particular emphasis upon the cold filaments which are often seen in satellite images. This was a multi-investigator, multi-institution program. Several other cruises were conducted in the coastal region of Northern California during 1987 and 1988 which provide additional information (Strub *et al.* 1990).

The SQ87 cruise site was located along the northern California coast between Cape Mendocino and San Francisco (Fig. 1A and B). On Leg I, a closely spaced grid of stations was occupied. On Leg II, an array of satellite tracked drifters was deployed (Paduan and Niiler, in press), and sampling was conducted in the coastal water and in the vicinity of the drifters. The entire grid was occupied as planned on Leg I, but rough weather forced modifications to the sampling plan during Leg II.

This data report includes illustrations of the horizontal distributions of properties on Leg I at several standard depths (Figs. 2, 4, 5, 6, 7, 8, and 9). Patches of cold, relatively saline water were evident in the near surface distributions near the coast at Cape Mendocino and Point. Arena. This water was separated from the warmer, more saline water found offshore by a tongue of cool, low-salinity water. The 0 over 500 db dynamic height field and data collected with an ADCP (Hayward and Mantyla, in press) shows that the circulation in the upper layers of the survey region was dominated by an equatorward-flowing coastal jet composed of low-salinity water. The coastal jet meandered in association with a set of mesoscale eddies including a pair of cyclonic eddies located near Cape Mendocino and Pt. Arena, and an anticyclonic eddy offshore from Pt. Arena. The coastal jet was confined to the upper 100m, although weaker currents extended much deeper. The Cape Mendocino eddy was evident in the 500m density field, indicating that it extended to at least 500m depth.

Nutrients (NO_3, NO_2, PO_4, SiO_3) were elevated at the sea surface in the cold, saline water inshore of the coastal jet. The low-salinity water in the core of the coastal jet was depleted of nutrients in the upper layer, as was the water further offshore. Chlorophyll patterns were generally similar to the distribution of nutrients in the mixed layer, although the coldest water was often low in chlorophyll because it had recently been derived from depths below the euphotic zone.

A set of vertical sections which pass through the Cape Mendocino eddy, coastal jet and waters offshore were also constructed (Fig. 3). The coastal jet and doming of isopycnal surfaces associated with the cyclonic flow of the eddy are evident. The salinity front at the inshore edge of the coastal jet marks the boundary between rich coastal water, where there are measurable nutrients at the sea surface and chlorophyll is high, and oligotrophic offshore water where nutrients are depleted from the mixed layer and upper pycnocline and chlorophyll is low. This boundary is also strongly evident in 50m distributions of salinity and nutrients.

Cruise SQ87 captured a unique snapshot of the chemical and biological response to strong current flow, as illustrated on the cover by the doughnut-shaped chlorophyll-*a* and oxygen saturation patterns within the Cape Mendocino eddy. The strong current flow exceeded 50 cm/s, resulting in a steep rise of the isopycnals and an outcropping of the deep chlorophyll maximum layer and the nitracline on the inside edge of the strong flow. With abundant light and nutrients available, an intense phytoplankton bloom occurred as reflected by the 64-fold increase in chlorophyll at the surface (chlorophyll is contoured so that adjacent contour differs by a factor of two) and a photosynthetic release of oxygen, as reflected by the surface saturation in excess of 120%. Within the center of the eddy, the water has originated from depths deeper than the chlorophyll maximum layer and it was still below 100% saturation in oxygen and low in plant cells, resulting in the "doughnut." Only a rapid, closely-spaced station grid could reveal these interrelationships.

STANDARD PROCEDURES

Conductivity/Temperature/Depth (CTD) Data

A Neil Brown Instrument Systems CTD was used successfully on 120 stations to a maximum planned sampling depth of 500m on Leg I or 300mm on Leg II, bottom depth permitting. Scheduled CTD stations were replaced by shallow Nansen wire casts on some Leg II stations when the weather was too rough to safely operate the CTD. Checks on the CTD temperature and computed salinity were made on most CTD casts by comparison with deep-sea reversing thermometers and salinity samples from Niskin rosette bottles tripped near the surface and at the maximum CTD depth. The CTD data were processed and calibrated by personnel at the ODF who provided MLRG with a computer tape of the corrected CTD temperature and salinity data at one-db intervals. CTD oxygen probe data were not processed. Standard depth data listed in this report have been extracted from the one-db interval tapes using the Saunders (1981) pressure-to-depth conversion technique. Profiles of the one-db interval CTD data appear at the end of this report. The complete one-db interval tapes has been sent to NODC.

Hydrographic and Rosette Cast Data

The hydrographic casts on Leg I consisted of 20 epoxy-lined Nansen bottles lowered to a maximum sampling depth of 525m, bottom depth permitting. On Leg II, water samples were collected from 12 rosette bottles tripped within 200 meters of the surface. On stations where weather conditions did not permit safe operation of the CTD-rosette system, water samples were taken from a replacement 12-bottle Nansen wire cast. Temperature, salinity, dissolved oxygen, and nutrients were determined from all depths, and chlorophyll-*a* and phaeopigments from the top 12 depths sampled on the hydrographic and rosette casts. The same measurements were made on water samples collected from the near-surface mixed-layer CTD calibration bottles on CTD stations, and are reported with the hydrographic data.

Paired protected reversing thermometers were used on Nansen casts to determine temperatures which were recorded to hundredths of a degree Celsius. Nansen bottles used below a depth of about 75 meters were equipped with unprotected thermometers for determination of the depth of sampling, using the Saunders (1981) pressure to depth conversion technique. For rosette casts, pressures and temperatures were derived from the CTD at the time of the rosette bottle trip. CTD derived temperatures are listed to three decimal places.

Salinity samples were analyzed at sea using inductive-type salinometers. Salinometers were standardized with substandard seawater. Periodic checks on the concentration of the substandard were made by comparison with Wormley Standard Seawater batch P-96. The salinity values are reported to three decimal places.

Dissolved oxygen was determined by the Winkler method as modified by Carpenter (1965), using the equipment and procedure outlined by Anderson (1971). Percent oxygen saturation was calculated from the equations of Weiss (1970).

Silicate, phosphate, nitrate and nitrite nutrients were determined at sea using an automated analyzer. The procedures used are similar to those described in Atlas *et al.* (1971).

Chlorophyll-*a* and phaeopigments were measured with a fluorometric technique (Yentsch and Menzel, 1963; Holm-Hansen *et al.* 1965) from subsamples filtered onto GF/C filters. The pigments were extracted with a cold extraction technique in 90% acetone (Venrick and Hayward 1984) and the fluorescence determined before and after acidification with a fluorometer.

The observed data have been evaluated using the methodology described by Klein (1973). This involves consideration of their variation as functions of density or depth and their relations to each other, and comparisons with adjacent observations.

Expendable Bathythermograph (XBT) Data

XBT's were dropped while the ship was underway approximately halfway between scheduled CTD or hydrographic stations on Leg I, and at additional locations on Leg II, as indicated on the station position maps (Fig. 1A and 1B). The XBT probes were preconditioned by soaking in a bucket of running surface seawater in order to minimize bias (Roemmich and Cornuelle 1987). The XBT data were recorded and digitized on a PC-type microcomputer and are reported at selected standard depths in this report to the nearest 0.01°C. Roemmich and Cornuelle (1987) state that uncalibrated XBT's such as those used on this cruise have a standard deviation temperature error of about 0.05°C.

Primary Productivity Casts

Primary production was estimated from ^{14}C uptake using a simulated *in situ* technique. Light penetration was estimated from the Secchi depth (assuming that the 1% light level is three times the Secchi depth). Six depths, corresponding to predetermined levels of light penetration, were sampled with 5-l Niskin bottles equipped with epoxy coated springs and silicone rubber o rings. Temperature, salinity, oxygen, nutrients, chlorophyll-*a*, and phaeopigments were determined for all depths sampled. Triplicate samples (two light and one dark control) were drawn from each depth into 250-ml polycarbonate incubation bottles. Samples were inoculated with 10 µCi of ^{14}C as $NaHCO_3$ (200 µl of 50 µCi/ml stock) prepared in a 0.3g liter^{-1} solution of sodium carbonate (Fitzwater *et al.*, 1982). These were incubated from local apparent noon to civil twilight in seawater-cooled incubators with neutral-density screens which simulate the *in situ* light levels. At the end of the incubation, the samples were filtered on to HA milipore filters and placed in scintillation vials. One-half ml of 10% HCl was added to each sample. The sample was then allowed to sit, without a cap, at room temperature for 12 hours (after Lean and Burnison 1979). Following this, 10-ml of scintillation fluor were added to each sample and the samples were returned to SIO where the radioactivity was determined with a scintillation counter.

Macrozooplankton Net Tows

Macrozooplankton was sampled with a 71-cm mouth diameter paired net (bongo net) equipped with 0.505mm plankton mesh. Bottom depth permitting, the nets were towed obliquely from 210m to the surface. The tow time for a standard tow was 21.5 minutes. Volumes filtered were determined from flowmeter readings and the mouth area of the net. Only one sample of each pair was retained and preserved. The biomass, as wet displacement volume, after removal of large (> 5 ml) organisms, was determined in the laboratory ashore. These procedures are summarized in greater detail in Kramer *et al. (1972).*

Additional Data

Additional data collected but not tabulated in this report include continuous under way acoustic-doppler-current-profiles (ADCP) and continuous 3 meter temperatures, salinity and "chlorophyll" fluorescence along the ship's track. Nine satellite tracked drifters were launched on Leg II. Daily light meter casts were made with a Biospherical Instruments quantum scalor irradiance meter which profiled the penetration of photosynthetically active radiation (PAR) in the sea. The measured depth of 1% of the light penetrating the sea surface is tabulated with the secchi disk observations.

TABULATED DATA

CTD Cast Data

After removal of some surface spikes, temperature and salinity data were extracted from the one db interval tapes and are listed at standard depths, along with a few calculated parameters. Density-related parameters have been calculated from the Interna ional Equation of State of Seawater 1980 (EOS80; UNESCO 1981). Computed values of potential temperature, sigma-theta, specific volume anomaly (SVA), dynamic height or geopotential anomaly, and the observed pressure, are included at each standard depth. Two CTD stations are printed side by side. The time reported in the Greenwich mean time (GMT) taken at the time when the reported CTD observations begin. Bottom depths, determined acoustically, have been corrected using British Admiralty Tables (Carter 1980) and are reported in meters. Weather conditions have been coded using WMO code 4501.

Hydrographic and Rosette Cast Data

The time listed for hydrographic wire casts is the GMT time of the messenger release. For rosette casts, it is the time of the first bottle trip on the up cast. The other heading and calculated information are as far the CTD casts. Observed and interpolated standard depth data from hydrographic casts have been interspersed and are presented together sequentially by depth. Interpolated or extrapolated standard level data are noted by the footnote "ISL" printed after the depth.

Primary Productivity Casts

In addition to the normal hydrographic data, the tabulated data include: the light levels at which the samples were incubated, the uptake from each of the replicate light bottles (uptake 1 and uptake 2) which have been corrected for dark uptake by subtracting the dark value, the mean of the two uptake values, the dark uptake, chlorophyll-*a* and phaeopigments. The uptake values shown are the total for the incubation period. Also shown are the times of local apparent noon (LAN), civil twilight, and the vertically integrated value of the mean uptake from the surface to the deepest sample, assuming that the shallowest measured value extends to the surface and that negative values (when dark uptake exceeds light uptake) are zero. The uptake data have been presented to two significant digits (values <1.00) or one decimal (values >1.00). The higher production values may not warrant all of the digits presented. Incubation time, LAN, and civil twilight are given in local Pacific Standard Time (PST); to convert to GMT, add eight hours to the PST time.

Secchi Disk and Light Meter Observations

Secchi disk observations were made on most daylight stations and light meter measurements were made at six stations. The times are given in local PST (+8) time. Weather codes and cloud observations are also presented.

Macrozooplankton Data

Macrozooplankton biomass volumes are tabulated as total volume minus the volume of larger organisms ($cm^3/1000\ m^3$ strained). Tow times are given in Greenwich Mean Time (GMT).

FOOTNOTES

In addition to footnotes, special notations are used without footnotes because the meaning is always the same.

ISL: After depth values indicates interpolated or extrapolated standard level.

D: CTD value listed in place of normal ship-board hydrographic measurement.

E: CTD profile extrapolated to next standard depth.

U: Uncertain value. Values which are not used in interpolation because they seem to be in error without apparent reason.

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PERSONNEL

Cruise SQ87

SHIP'S CAPTAIN

Phillip L. Munsch, RV *New Horizon*

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

		Participation (Leg)
Hayward, Thomas L. (Chief Scientist)	Assistant Research Oceanographer, SIO	I, II
Bogden, Phillip	Graduate Student, SIO	I, II
Bos, David L.	Staff Research Associate, SIO	I, II
Bucklin, Ann C.	Visiting Scientist, SIO	I, II
Costello, James P.	Staff Research Associate, SIO	I, II
Gripp, Sherry L.	Staff Res. Assoc./Marine Tech., SIO	I, II
Illeman, Judy D.	Programmer, SIO	I, II
Mantyla, Arnold W.	Specialist in Oceanography, SIO	I
Masten, Douglas M.	Marine Technician, SIO	I, II
Mattson, Carl W.	Electronics Technician, SIO	I, II
Niiler, Pearn P.	Professor, SIO	II
Patrick, Ronald G.	Staff Research Associate, SIO	I, II
Plummer, Kenneth M.	Staff Research Associate, SIO	I, II
Poulain, Pierrot	Graduate Student, SIO	II
Regier, Lloyd A.	Prin. Development Engineer. SIO	I
Wells, James A.	Marine Technician, SIO	I, II

Leg I: San Diego to Eureka, CA, April 28–May 13, 1987.

Leg II. Eureka to San Diego, CA, May 14–23, 1987.

FIGURES

Cruise SQ87

1. Cruise SQ87 track and station positions. A) Leg I, B) Leg II. The line across the northern part of the grid indicates the location of the vertical sections shown in Figure 3.

2. Maps of Leg I near-surface characteristics. A) Geostrophic current flow as represented by dynamic height anomalies at the surface with respect to 500 db. B) Potential density anomaly. C) Potential temperature. D) Salinity. E) Nitrate. F) Chlorophyll-*a*. G) Dissolved oxygen. H) Oxygen percent saturation.

3. Vertical sections across the northern part of the pattern, location shown in Fig. 1A. A) Geostrophic velocity relative to 500 db. Positive flow is northward. B) Potential density anomaly. C) Potential temperature. D) Salinity. E) Nitrate. F) Phosphate. G) Silicate. H) Chlorophyll-*a*. I) Dissolved oxygen. J) Oxygen percent saturation. K) Phaeopigments. L) Nitrite.

4. As in Fig. 2, except at 50m.

5. As in Fig. 2, except at 100m.

6. As in Fig. 2, except at 150m.

7. Maps of Leg I characteristics at 200m. A) Geostrophic current flow as represented by dynamic height anomalies at 200 db with respect to 500 db. B) Potential density anomaly. C) Potential temperature. D) Salinity. E) Nitrate. F) Silicate. G) Dissolved oxygen. H) Oxygen percent saturation.

8. As in Fig. 7, except at 300m.

9. Maps of Leg I characteristics at 500m. A) Potential density anomaly. B) Potential temperature. C) Salinity. D) Phosphate. E) Nitrate. F) Silicate. G) Dissolved oxygen. H) Oxygen percent saturation.

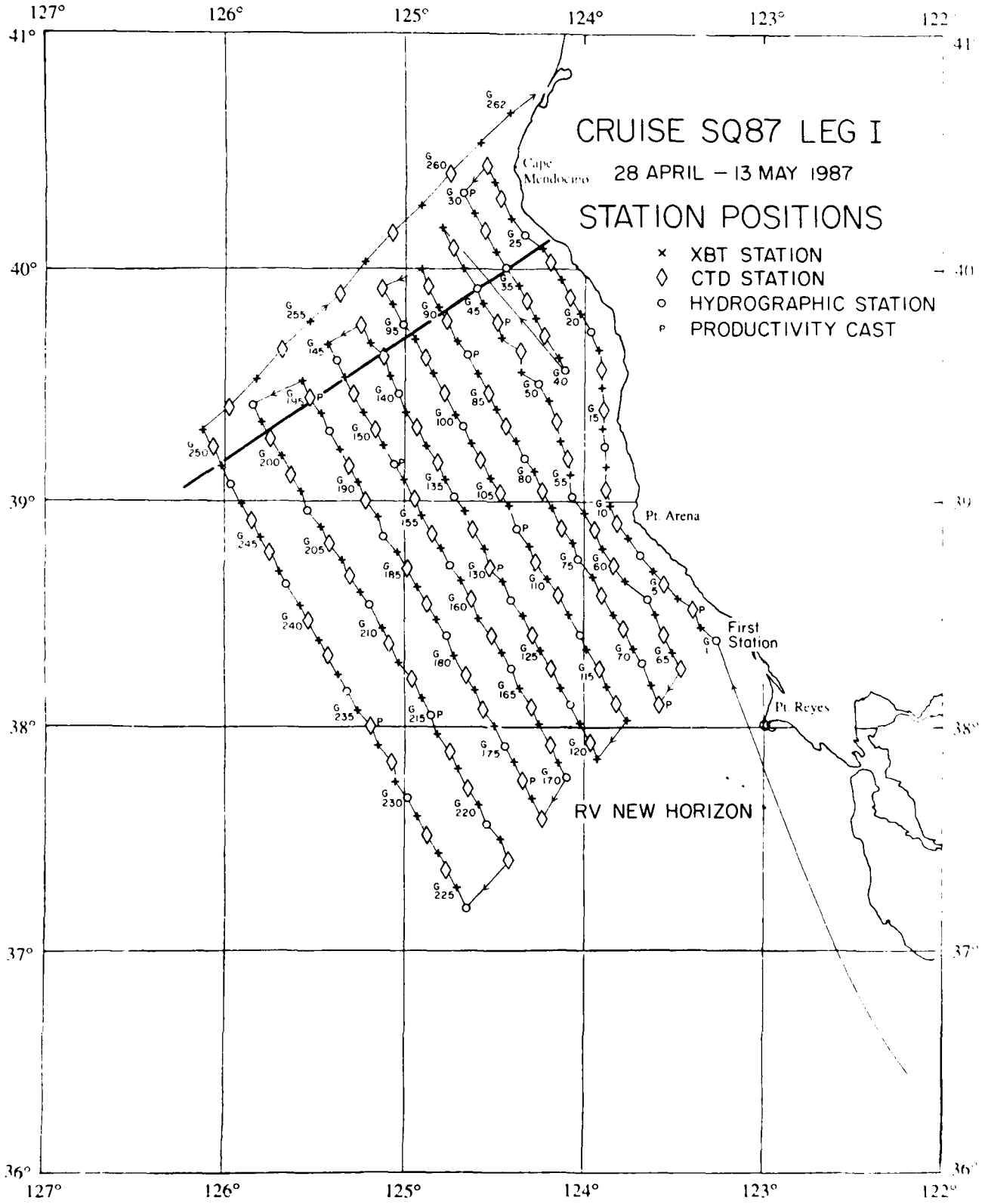
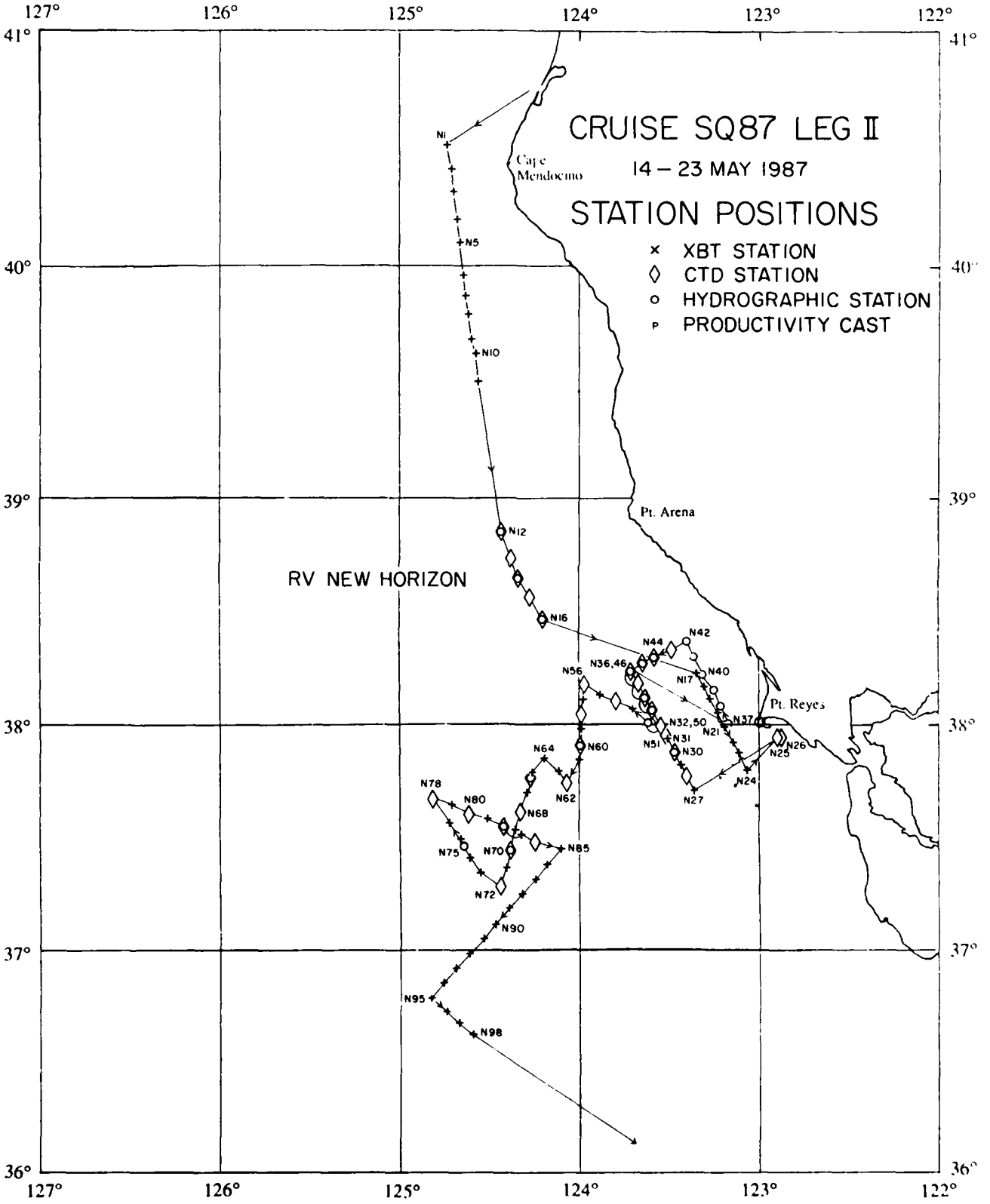

CRUISE SQ87 LEG I
28 APRIL – 13 MAY 1987
STATION POSITIONS
× XBT STATION
◇ CTD STATION
○ HYDROGRAPHIC STATION
P PRODUCTIVITY CAST
Cape Mendocino
Pt. Arena
First Station
Pt. Reyes
RV NEW HORIZON
127°
126°
125°
124°
123°
122°
41°
40°
39°
38°
37°
36°

FIGURE 1A


CRUISE SQ87 LEG II
14 – 23 MAY 1987
STATION POSITIONS
× XBT STATION
◊ CTD STATION
o HYDROGRAPHIC STATION
P PRODUCTIVITY CAST
RV NEW HORIZON
Cape Mendocino
Pt. Arena
Pt. Reyes
127°
126°
125°
124°
123°
122°
41°
40°
39°
38°
37°
36°
N1
N5
N10
N12
N16
N17
N21
N24
N25
N26
N27
N30
N31
N32,50
N36,46
N37
N40
N42
N44
N51
N56
N60
N62
N64
N68
N70
N72
N75
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N80
N85
N90
N95
N98

FIGURE 1B

CRUISE SQ87 Leg I
28 April - 13 May 1987
NEAR SURFACE

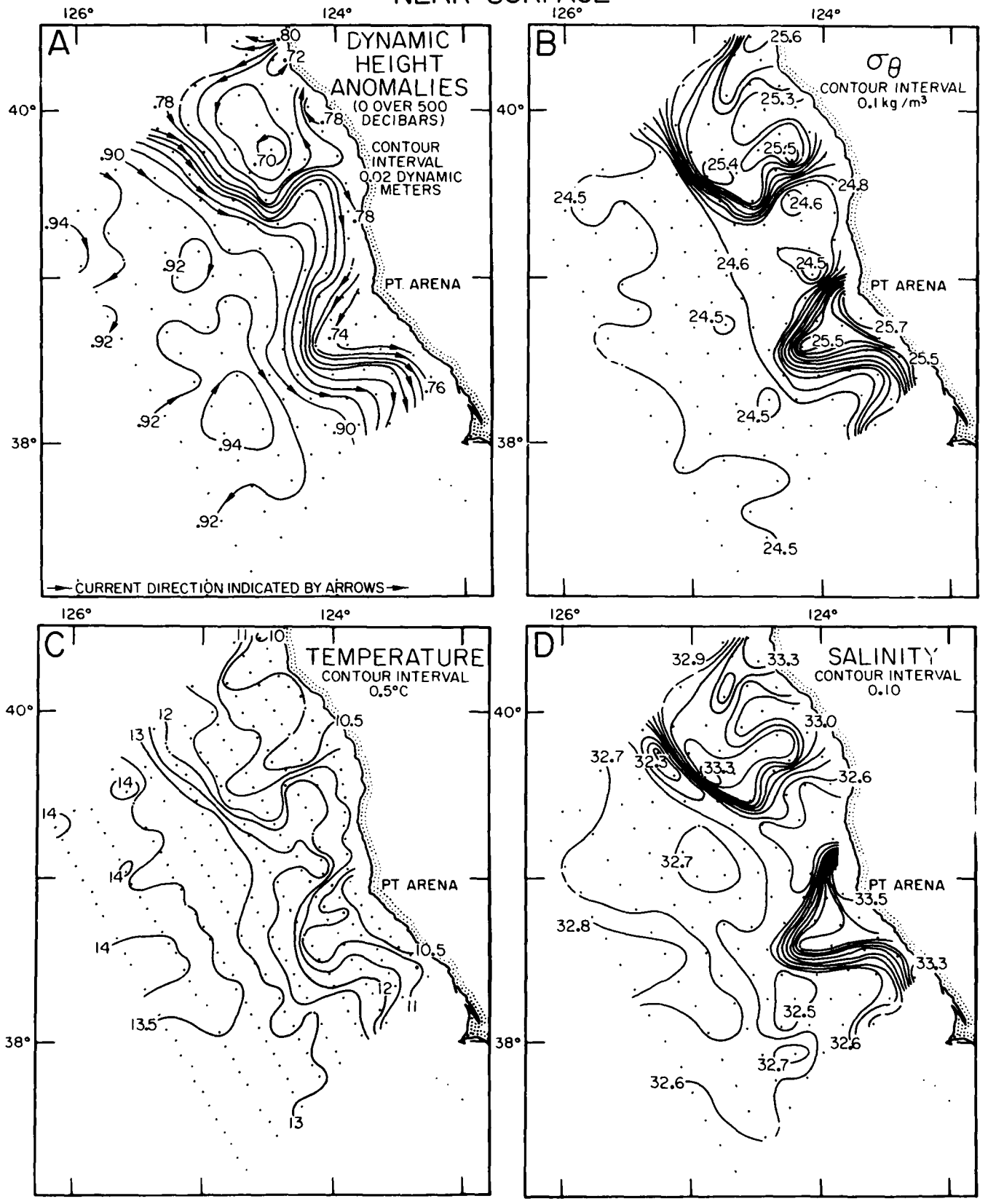


FIGURE 2

CRUISE SQ87 Leg I
28 April - 13 May 1987
NEAR SURFACE

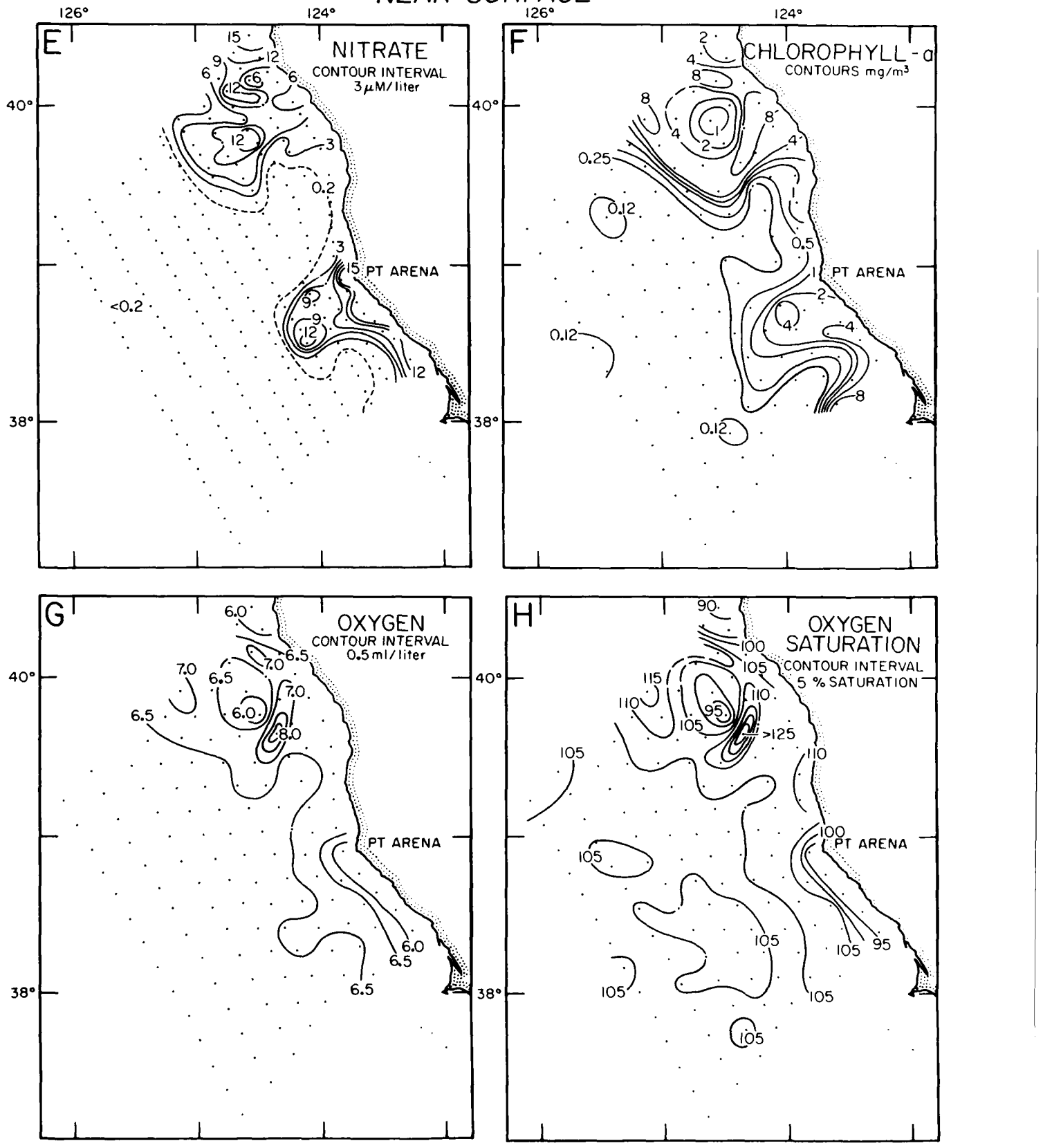


FIGURE 2

CRUISE SQ87 Leg I
28 April - 13 May 1987

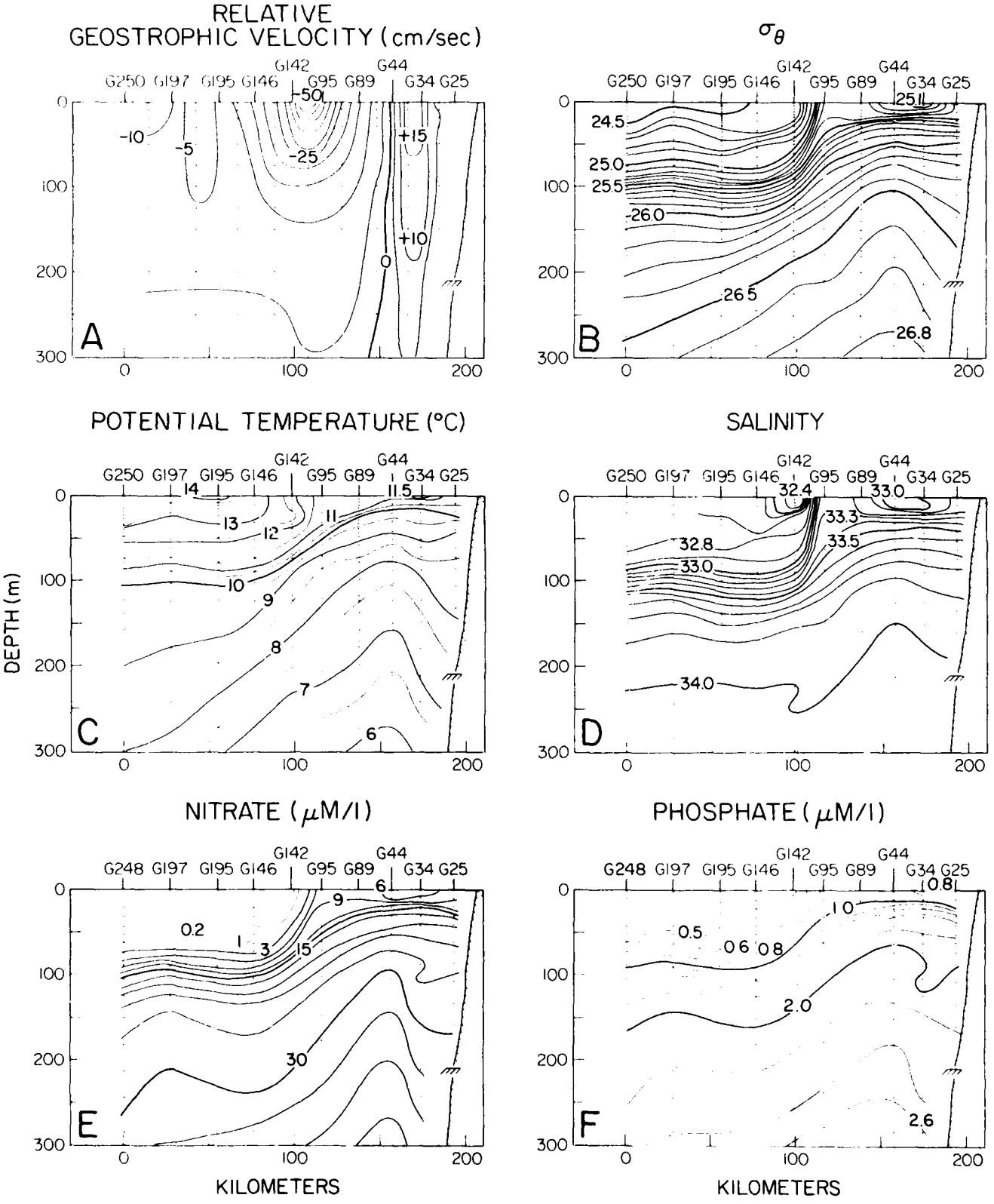


FIGURE 3

CRUISE SQ87 Leg I
28 April - 13 May 1987

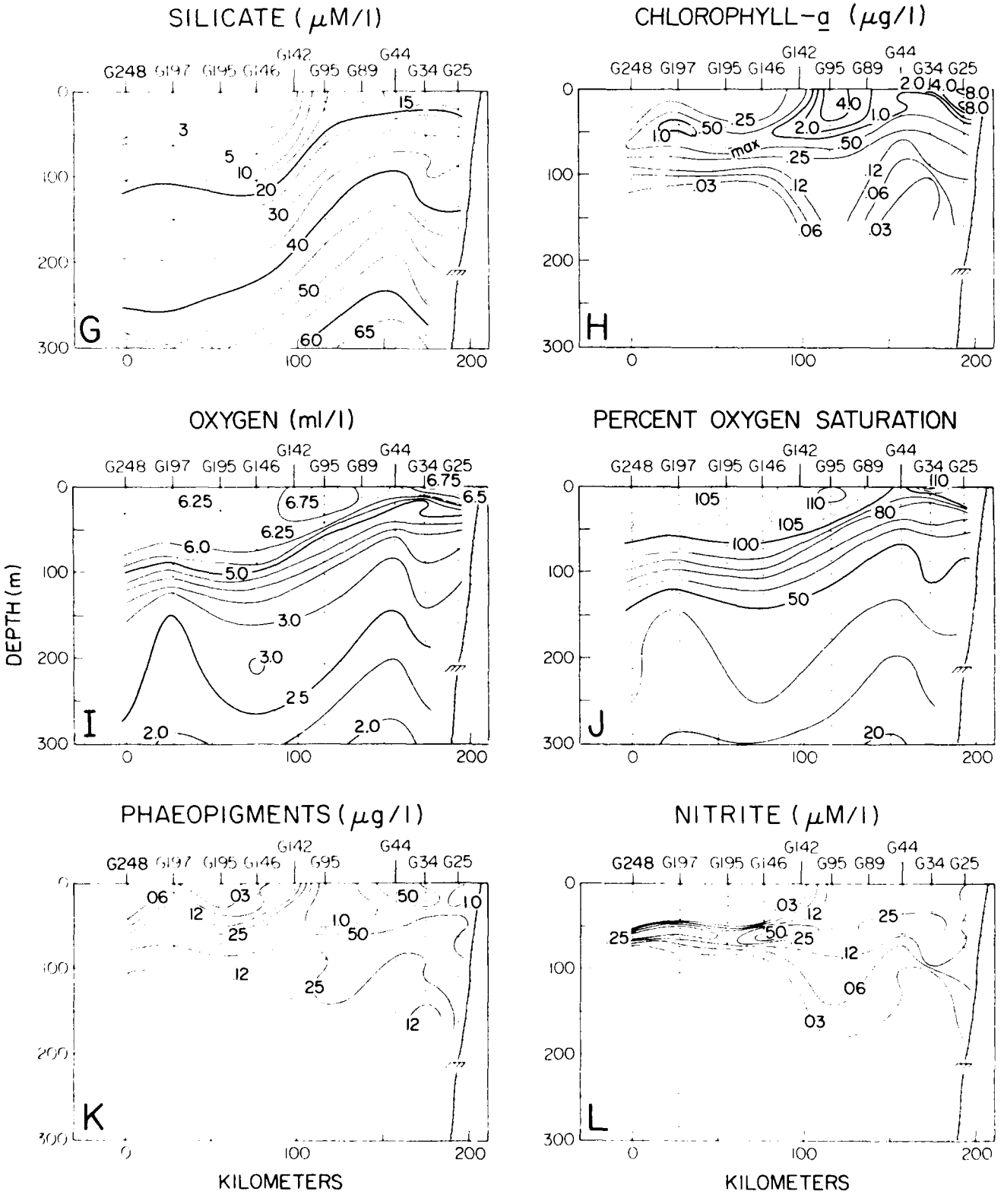


FIGURE 3

CRUISE SQ87 Leg I
28 April - 13 May 1987
50 m

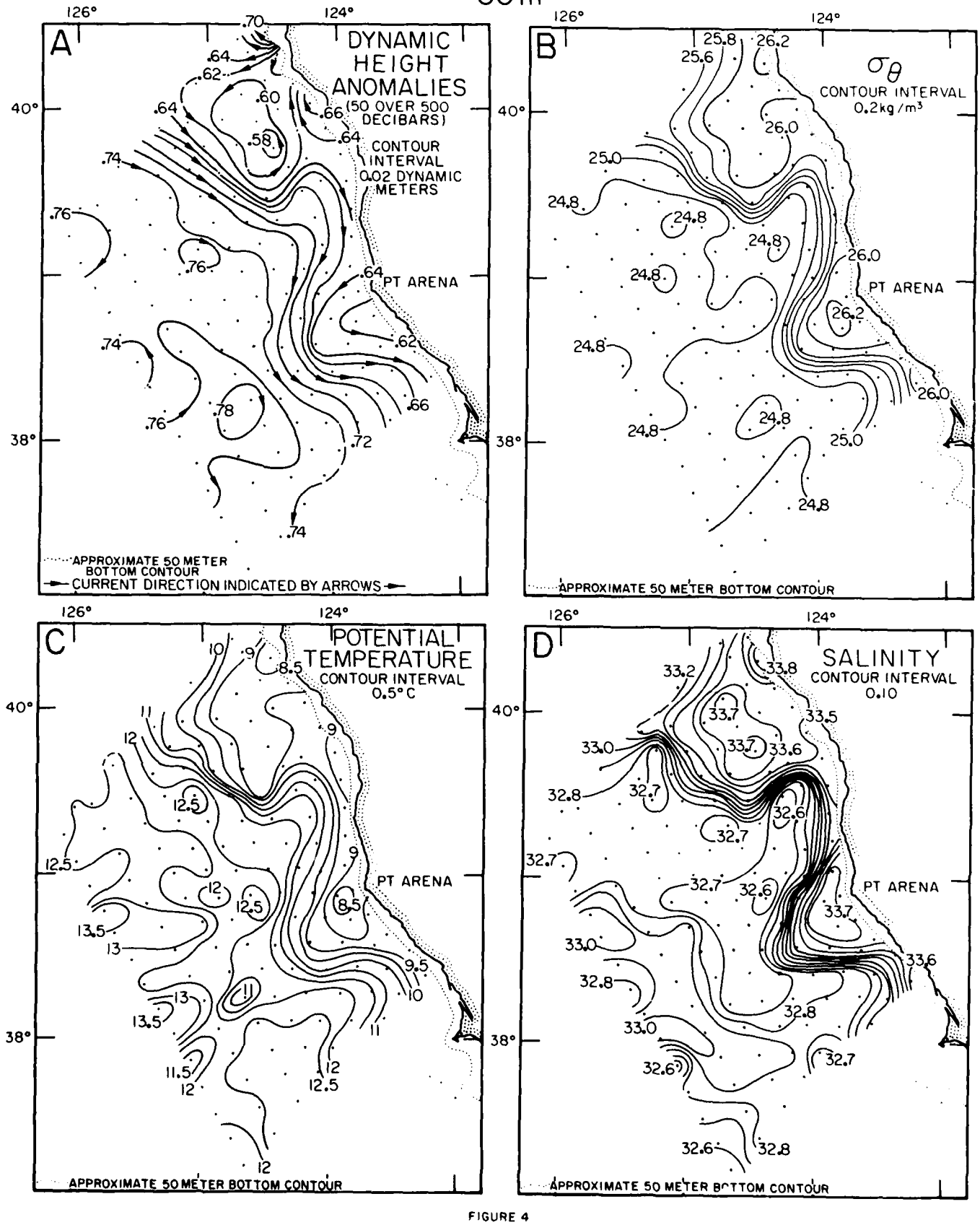


FIGURE 4

CRUISE SQ87 Leg I
28 April - 13 May 1987
50m

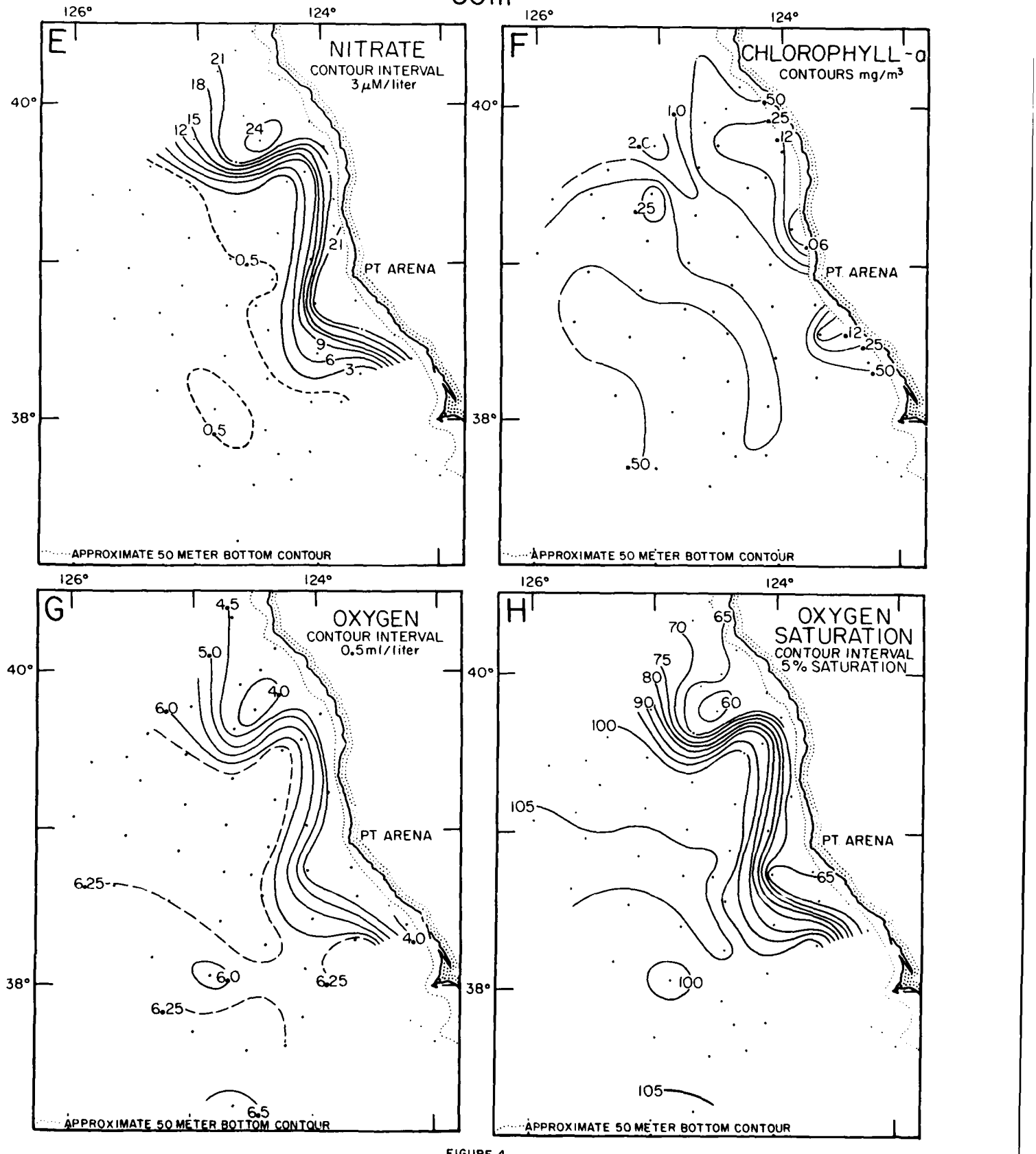


FIGURE 4

CRUISE SQ87 Leg I
28 April - 13 May 1987
100m

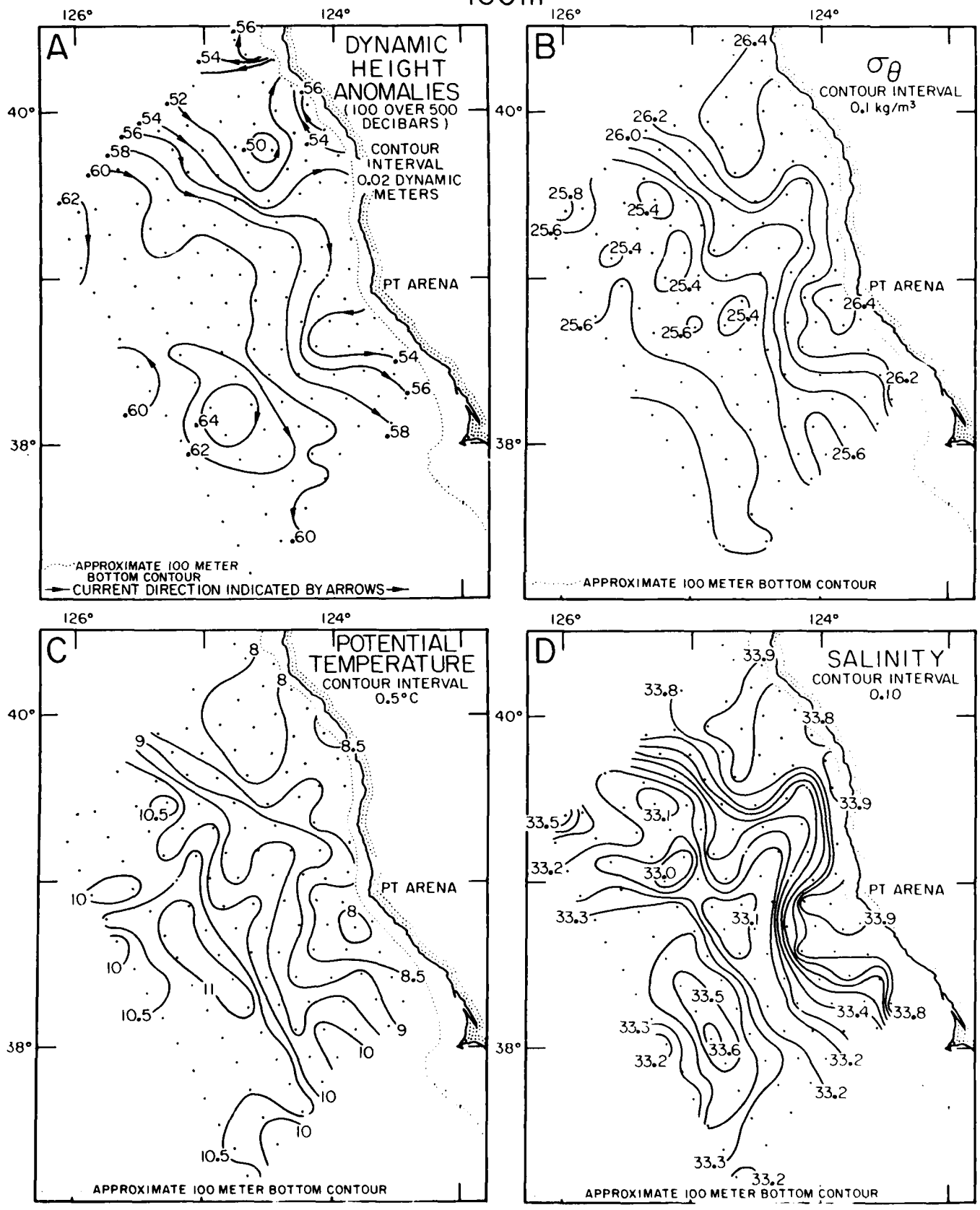


FIGURE 5

CRUISE SQ87 Leg I
28 April - 13 May 1987
100m

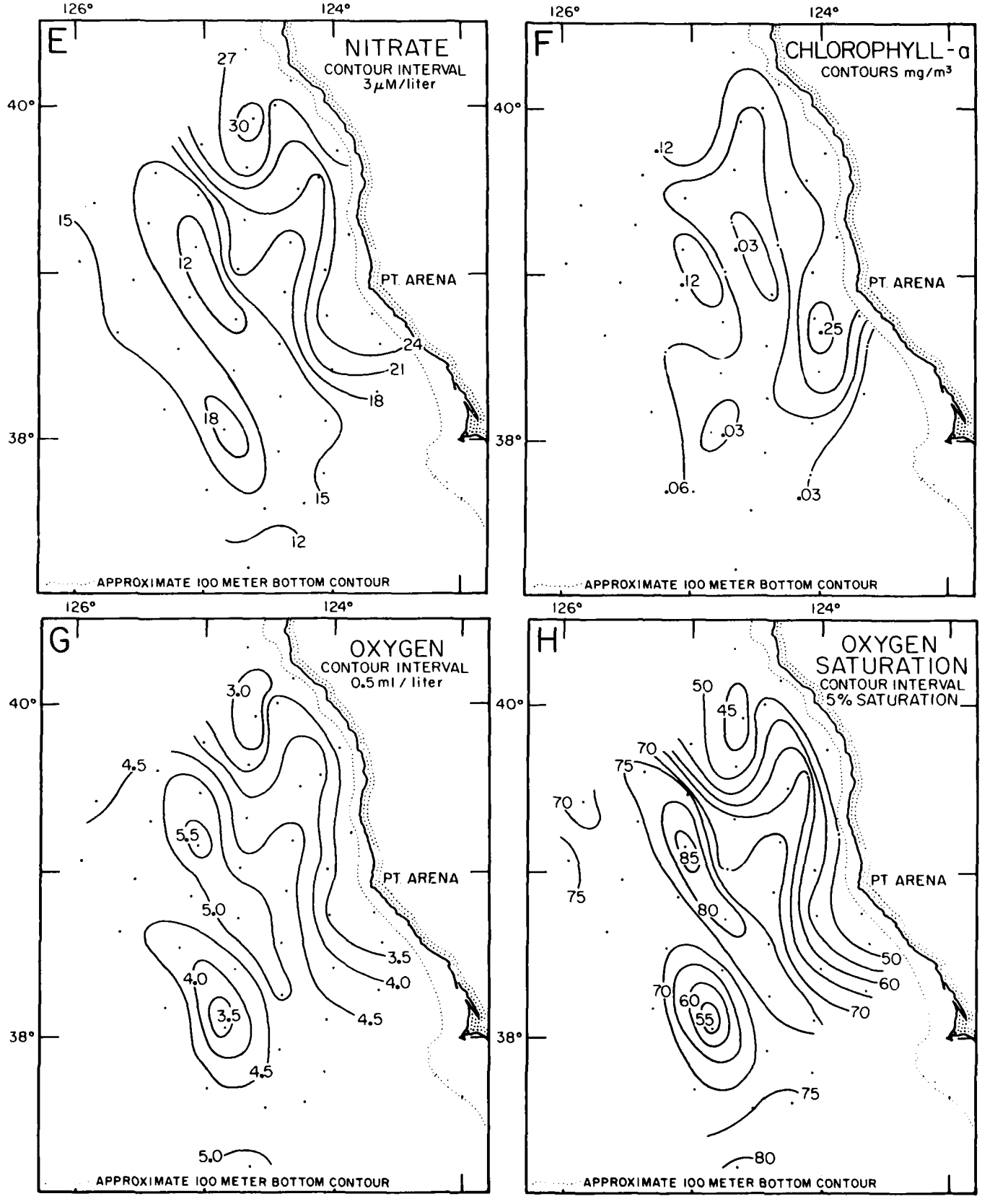


FIGURE 5

CRUISE SQ87 Leg I
28 April - 13 May 1987
150 m

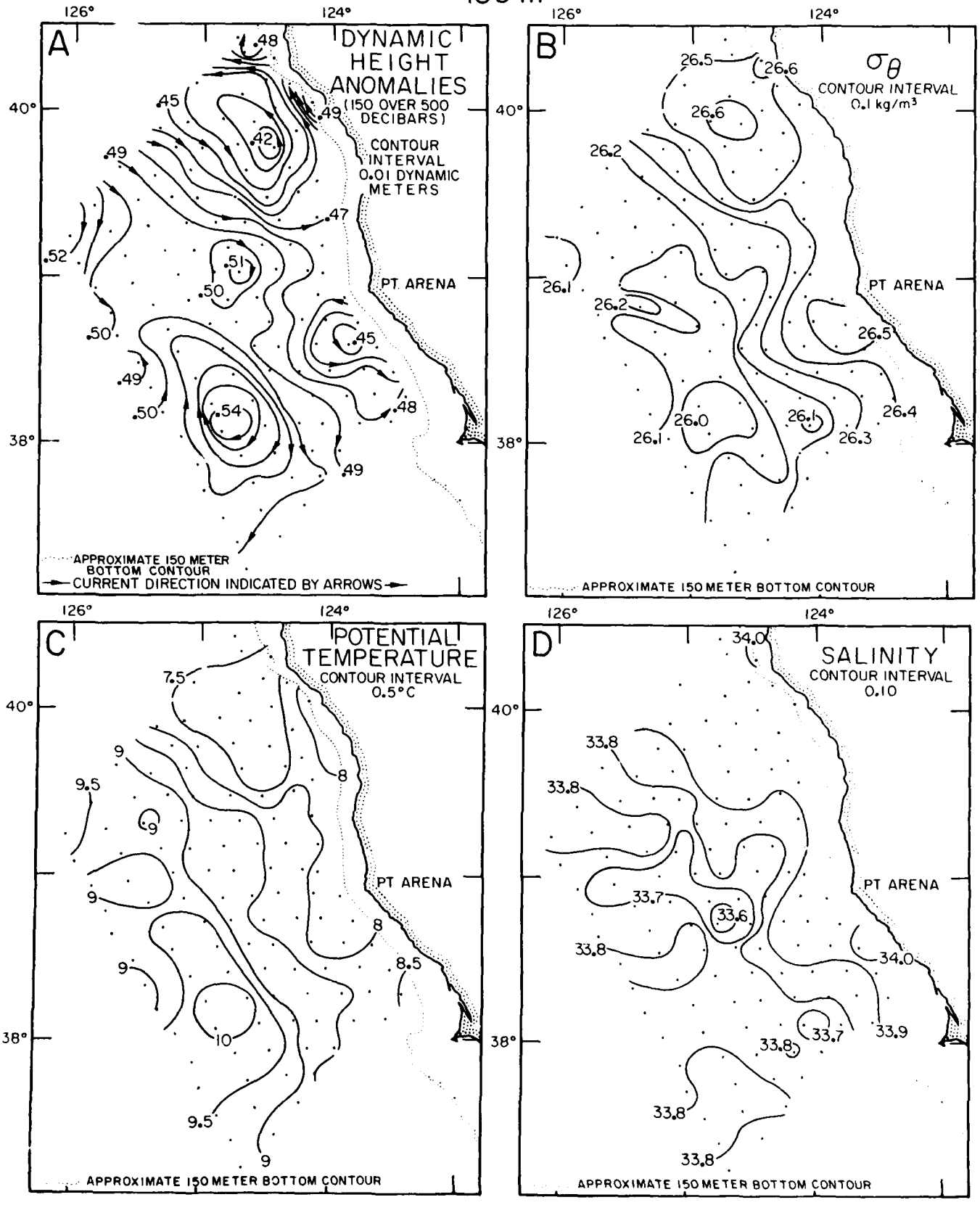


FIGURE 6

CRUISE SQ87 Leg I
28 April - 13 May 1987
150 m

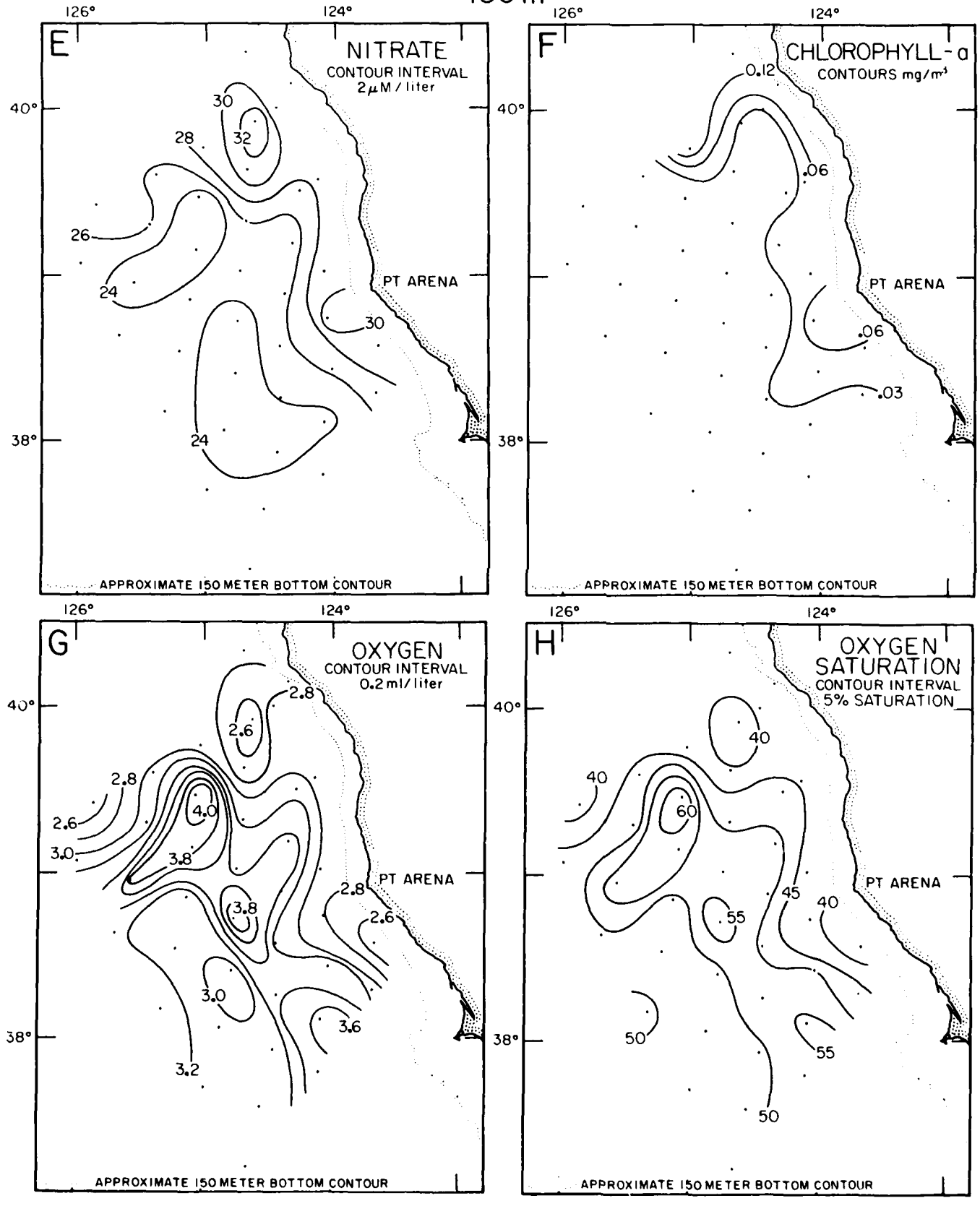


FIGURE 6

CRUISE SQ87 Leg I
28 April - 13 May 1987
200m

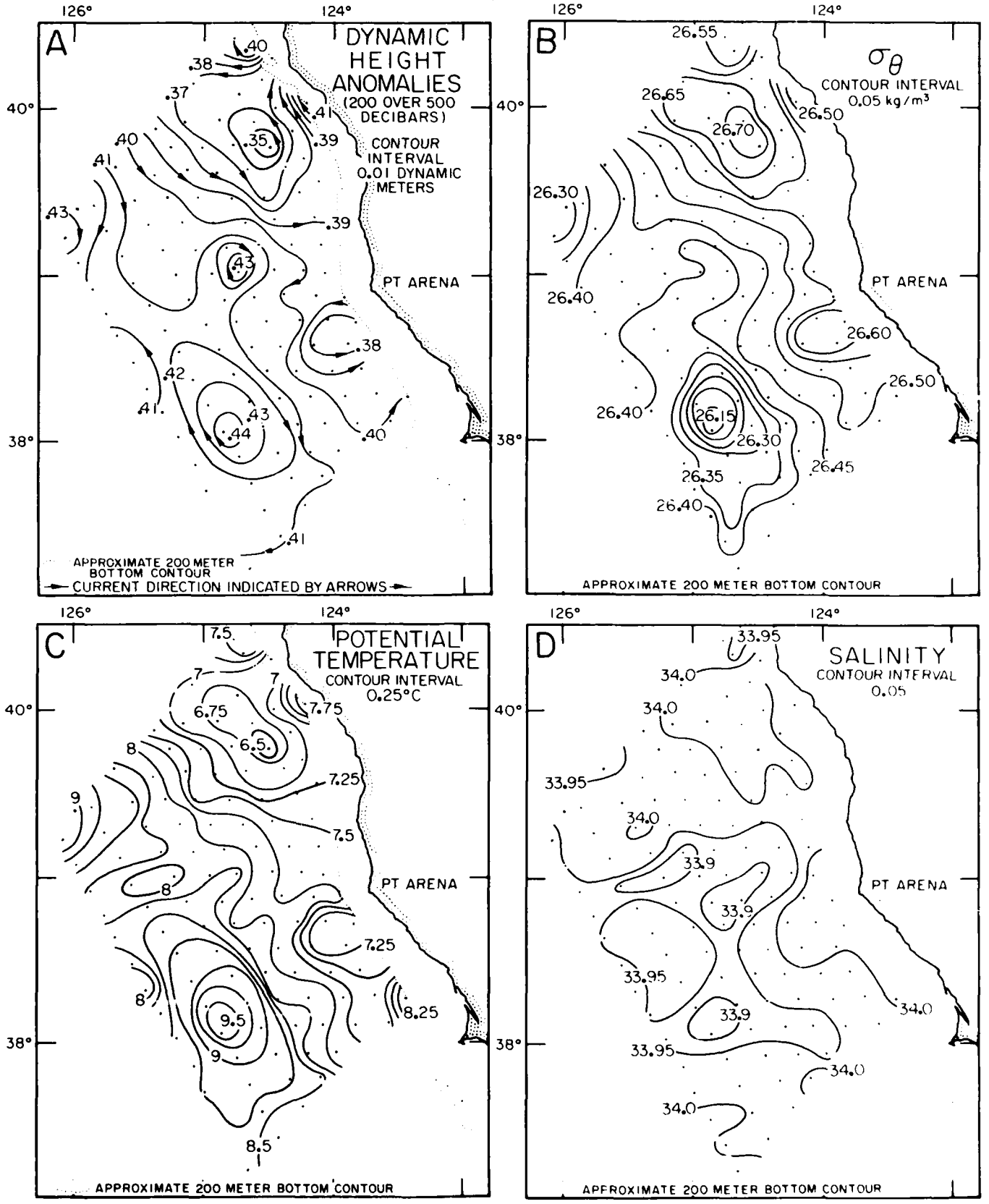


FIGURE 7

CRUISE SQ87 Leg I
28 April - 13 May 1987
200 m

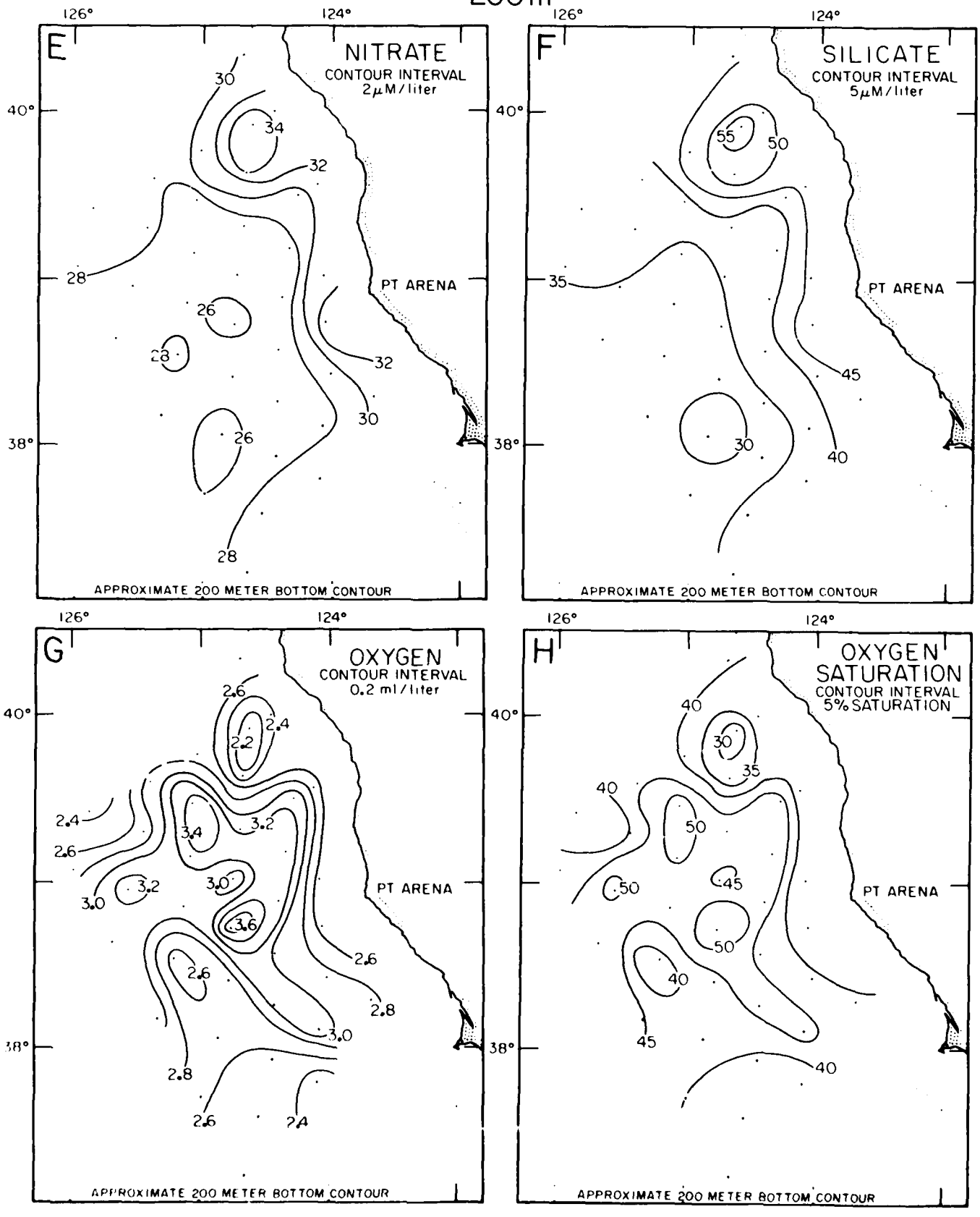


FIGURE 7

CRUISE SQ87 Leg I
28 April - 13 May 1987
300 m

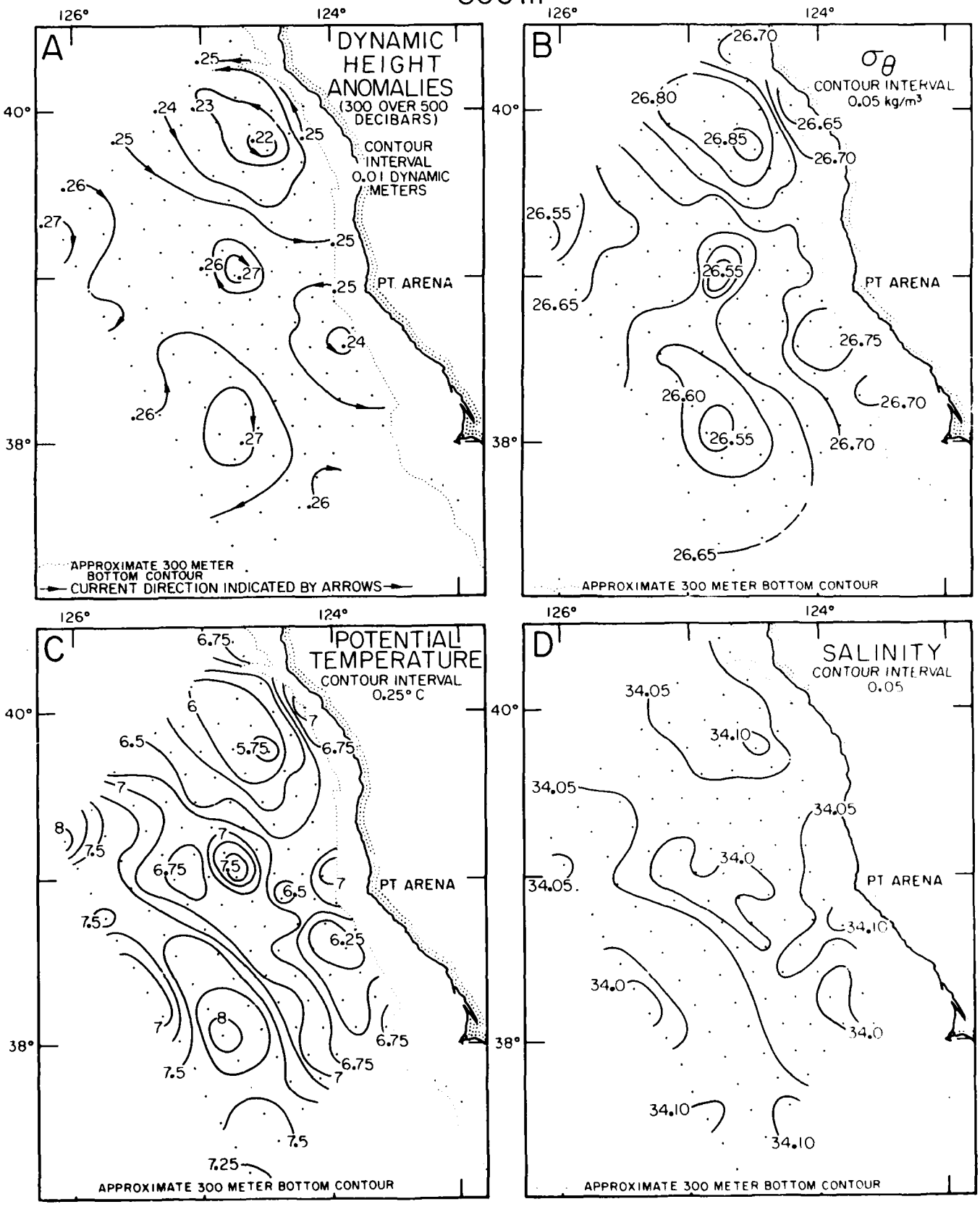


FIGURE 8

CRUISE SQ87 Leg I
28 April - 13 May 1987
300 m

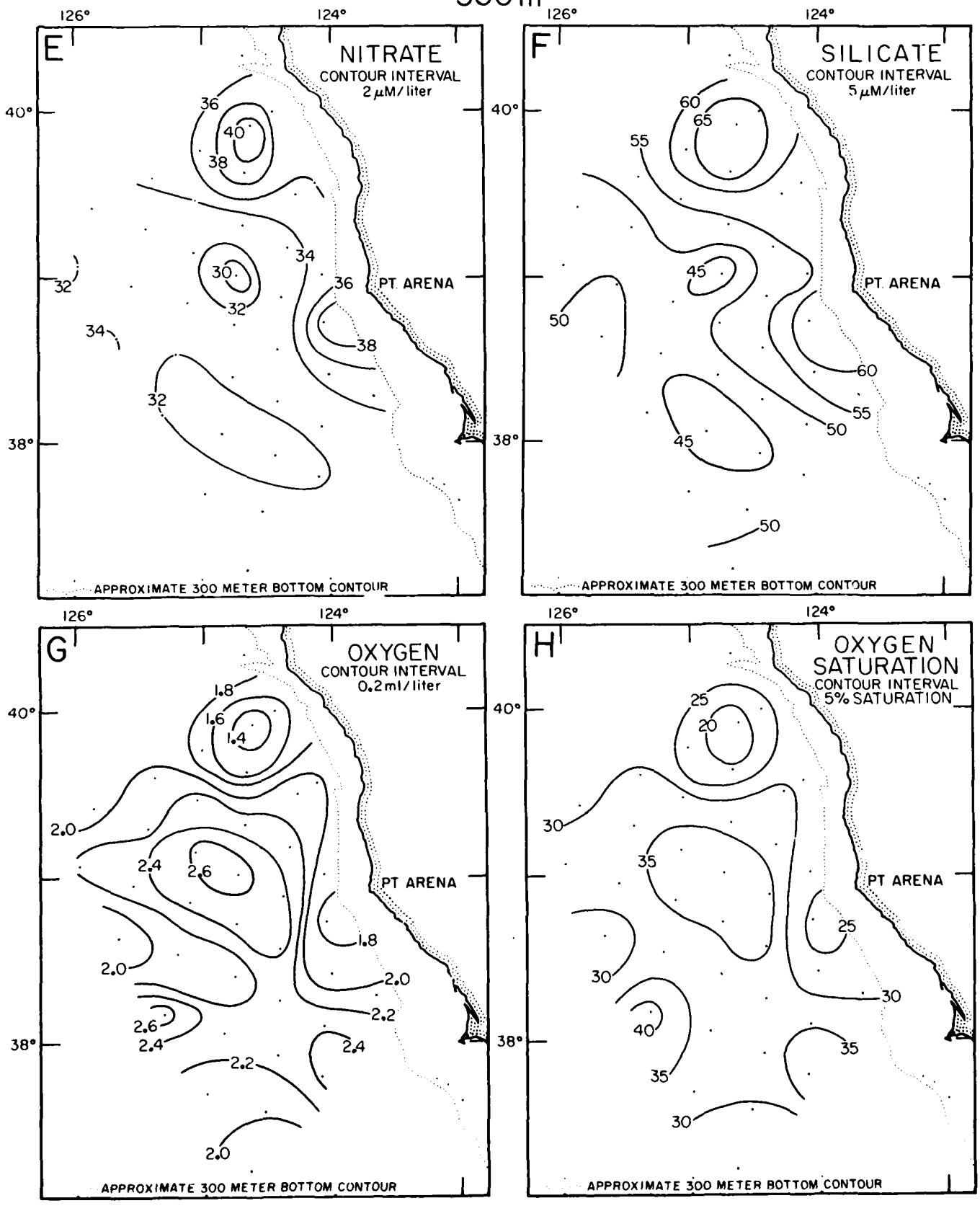


FIGURE 8

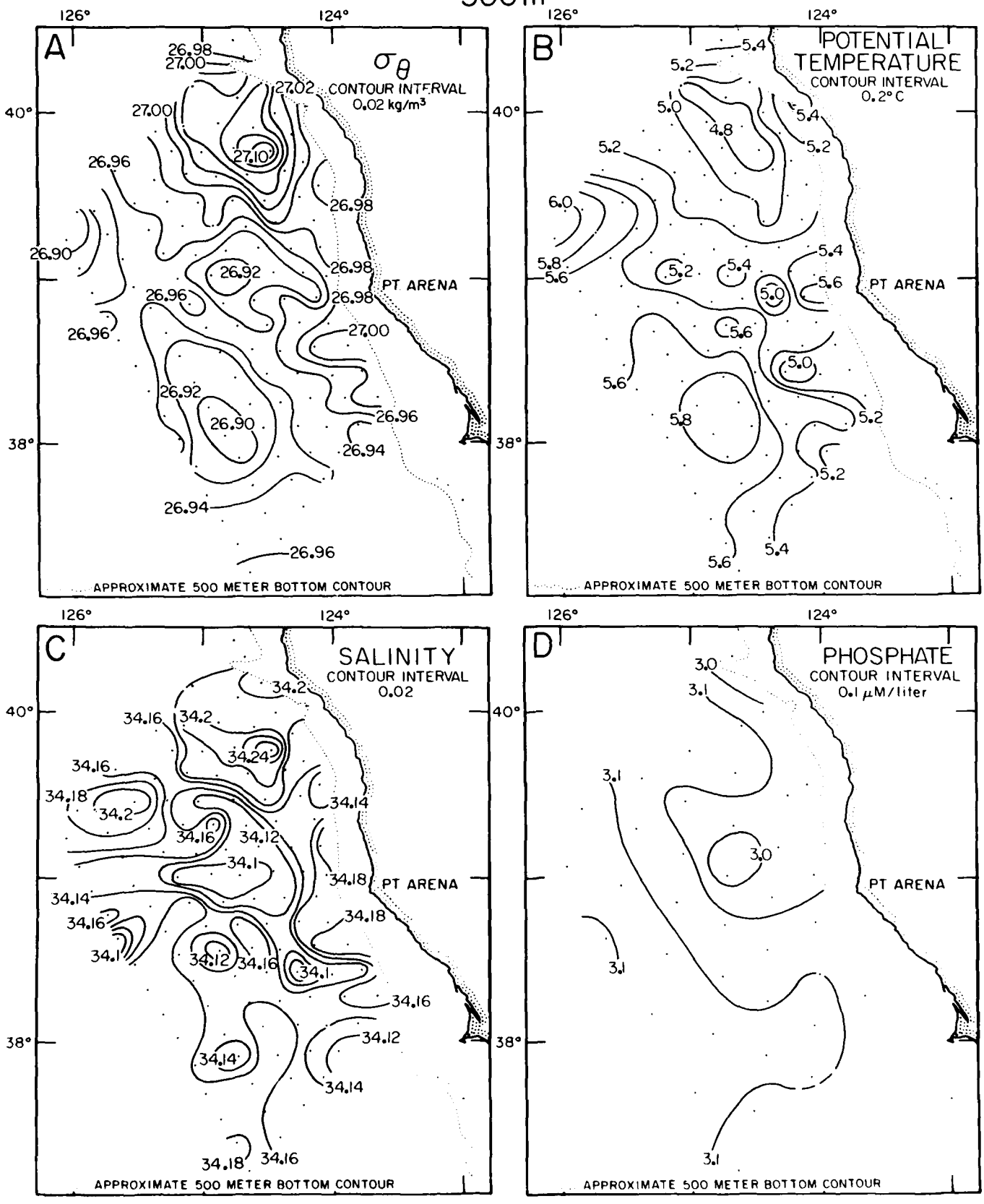

CRUISE SQ87 Leg I
28 April - 13 May 1987
500 m
A
σθ
CONTOUR INTERVAL
0.02 kg/m³
B
POTENTIAL
TEMPERATURE
CONTOUR INTERVAL
0.2°C
C
SALINITY
CONTOUR INTERVAL
0.02
D
PHOSPHATE
CONTOUR INTERVAL
0.1 μM/liter
126°
124°
40°
38°
PT ARENA
APPROXIMATE 500 METER BOTTOM CONTOUR

FIGURE 9

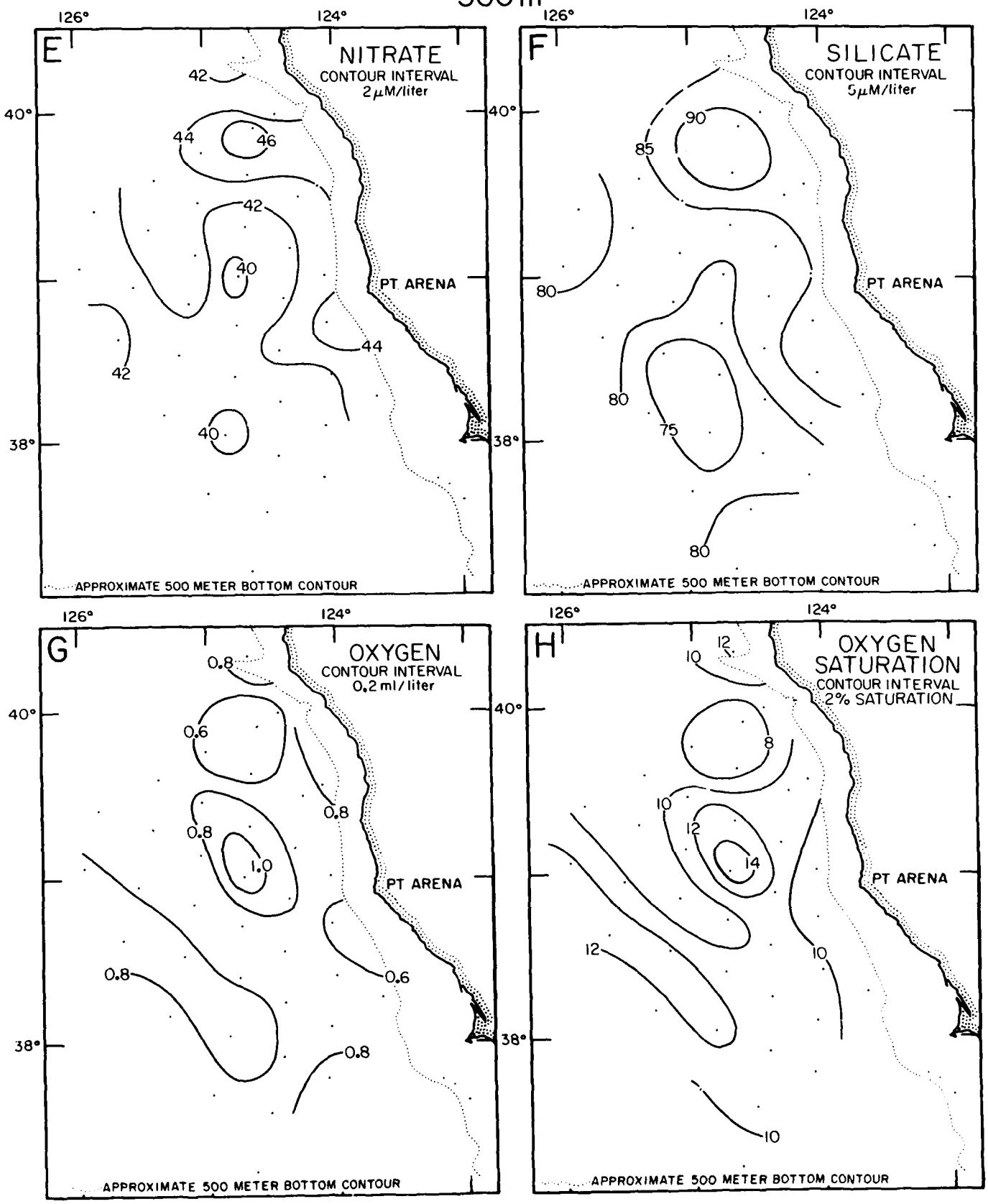

CRUISE SQ87 Leg I
28 April - 13 May 1987
500 m
E
NITRATE
CONTOUR INTERVAL
2 μM/liter
F
SILICATE
CONTOUR INTERVAL
5 μM/liter
G
OXYGEN
CONTOUR INTERVAL
0.2 ml/liter
H
OXYGEN
SATURATION
CONTOUR INTERVAL
2% SATURATION
126°
124°
40°
38°
PT ARENA
APPROXIMATE 500 METER BOTTOM CONTOUR

FIGURE 9

STATION G 3 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 31.6 N	123 23.4 W	30/04/87	1836 GMT	99 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
160	05 KT	240 04 05	2	1016.5 MB	12.3 C	12.0 C	8/8 SC

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	11.014	11.014	33.017	25.229	272.9	0.000	0
10	10.535	10.534	33.037	25.329	263.7	0.027	10
20	10.019	10.017	33.175	25.524	245.3	0.052	20
30	9.632	9.629	33.278	25.669	231.8	0.076	30
40	9.381	9.377	33.307	25.733	225.8	0.099	40
50	9.051	9.046	33.418	25.873	212.8	0.121	50
75	8.749	8.741	33.697	26.139	187.9	0.171	76
79	8.637	8.629	33.716	26.171	185.0	0.178	80

CRUISE SQ87 LEG I STATION G 5

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 38.1 N	123 33.2 W	30/04/87	2017 GMT	113 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
			2	1018.6 MB	14.1 C	13.9 C	8/8 SC

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	10.679	10.679	33.282	25.495	247.7	0.000	0
10	10.331	10.330	33.392	25.641	234.0	0.024	10
20	10.106	10.104	33.490	25.756	223.3	0.047	20
30	9.641	9.638	33.552	25.882	211.5	0.069	30
40	9.554	9.550	33.632	25.959	204.4	0.089	40
50	9.272	9.267	33.690	26.050	196.0	0.110	50
75	8.624	8.616	33.786	26.228	179.5	0.156	76
95	8.347	8.337	33.893	26.354	167.8	0.191	96

STATION G 9 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 53.9 N	123 49.0 W	30/04/87	2352 GMT	110 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
160	10 KT	110 05 06	5	1017.7 MB	13.5 C	13.4 C	8/8 ST

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	10.487	10.487	33.474	25.678	230.3	0.000	0
10	10.156	10.155	33.527	25.776	221.2	0.023	10
20	9.876	9.874	33.622	25.897	209.9	0.044	20
30	9.295	9.292	33.674	26.033	197.1	0.064	30
40	9.003	8.999	33.650	26.062	194.6	0.084	40
50	8.750	8.745	33.652	26.103	190.9	0.103	50
75	8.576	8.568	33.814	26.257	176.7	0.149	76
93	8.400	8.390	33.912	26.361	167.1	0.180	94

CRUISE SQ87 LEG I STATION G 11

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
39 3.0 N	123 52.8 W	01/05/87	0125 GMT	120 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
150	14 KT	170 05 06	5	1017.4 MB	12.1 C	12.0 C	8/8 ST

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	11.870	11.870	32.450	24.634	329.6	0.000	0
10	11.350	11.349	32.551	24.807	313.3	0.032	10
20	10.688	10.686	32.827	25.139	282.0	0.062	20
30	9.909	9.906	33.146	25.521	245.9	0.088	30
40	9.366	9.362	33.408	25.814	218.1	0.111	40
50	9.249	9.244	33.756	26.105	190.7	0.132	50
75	9.029	9.021	33.820	26.191	183.0	0.179	76
100	8.940	8.929	33.854	26.232	179.6	0.224	101
105	8.956	8.945	33.862	26.236	179.3	0.233	106

STATION G 15 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
39 23.6 N	123 53.6 W	01/05/87	0513 GMT	110 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
180	15 KT		2	1015.5 MB	11.1 C	10.8 C	8/8 NS

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	11.712	11.712	32.450	24.663	326.8	0.000	0
10	11.712	11.711	32.459	24.670	326.4	0.033	10
20	11.035	11.033	32.618	24.916	303.2	0.064	20
30	10.301	10.298	32.902	25.264	270.3	0.093	30
40	9.663	9.659	33.084	25.513	246.8	0.119	40
50	9.155	9.150	33.300	25.764	223.1	0.142	50
75	8.678	8.670	33.772	26.208	181.3	0.193	76
98	8.537	8.527	33.873	26.310	172.2	0.233	99

CRUISE SQ87 LEG I STATION G 17

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
39 34.2 N	123 54.9 W	01/05/87	0646 GMT	132 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
190	11 KT		1	1018.1 MB	11.1 C	10.6 C	6/8 NS

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	11.467	11.467	32.531	24.771	316.6	0.000	0
10	11.454	11.453	32.551	24.788	315.1	0.032	10
20	10.239	10.237	32.895	25.269	269.6	0.061	20
30	10.044	10.041	33.107	25.468	250.9	0.087	30
40	9.079	9.075	33.296	25.772	222.1	0.110	40
50	8.933	8.928	33.416	25.889	211.1	0.132	50
75	8.345	8.337	33.894	26.355	167.4	0.179	76
100	8.392	8.382	33.917	26.366	166.8	0.221	101
115	8.377	8.365	33.915	26.367	167.0	0.246	116

STATION G 21 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
39 52.8 N	124 5.3 W	01/05/87	1006 GMT	125 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
250	08 KT		1	1018.7 MB	10.0 C	10.0 C	5/8 SC

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	10.756	10.756	32.869	25.160	279.5	0.000	0
10	10.462	10.461	32.940	25.266	269.7	0.027	10
20	10.138	10.136	33.080	25.430	254.2	0.054	20
30	9.774	9.771	33.409	25.748	224.2	0.078	30
40	9.480	9.476	33.427	25.811	218.5	0.100	40
50	9.052	9.047	33.465	25.909	209.3	0.121	50
75	8.659	8.651	33.734	26.181	183.9	0.170	76
100	8.520	8.510	33.763	26.226	180.1	0.216	101
104	8.541	8.530	33.800	26.252	177.7	0.223	105

CRUISE SQ87 LEG I STATION G 23

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
40 1.5 N	124 12.0 W	01/05/87	1145 GMT	659 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
180	04 KT		1	1019.2 MB	10.8 C	10.8 C	3/8 CU

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	10.558	10.558	32.921	25.234	272.5	0.000	0
10	10.501	10.500	32.979	25.290	267.4	0.027	10
20	9.667	9.665	33.364	25.730	225.7	0.052	20
30	9.583	9.580	33.429	25.795	219.8	0.074	30
40	9.457	9.45[illegible]	33.516	25.884	211.5	0.095	40
50	9.179	9.174	33.566	25.968	203.7	0.116	50
75	8.696	8.688	33.688	26.140	187.8	0.165	76
100	8.420	8.410	33.808	26.277	175.3	0.211	101
125	8.215	8.202	33.912	26.389	165.0	0.253	126
150	8.062	8.047	33.945	26.438	160.8	0.294	151
175	8.033	8.015	33.949	26.446	160.5	0.334	176
200	8.005	7.985	33.952	26.453	160.3	0.374	202
225	7.984	7.961	33.954	26.458	160.2	0.414	227
250	7.952	7.927	33.956	26.465	160.0	0.454	252
275	7.477	7.450	33.997	26.566	150.6	0.493	277
300	7.168	7.140	34.029	26.635	144.4	0.530	302
350	6.731	6.699	34.067	26.725	136.3	0.600	353
400	6.431	6.395	34.088	26.781	131.5	0.667	403
450	6.019	5.980	34.132	26.869	123.5	0.731	454
500	5.443	5.401	34.186	26.983	112.8	0.790	504
520	5.318	5.275	34.206	27.014	110.0	0.812	525

STATION G 27 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
40 18.2 N	124 28.3 W	01/05/87	1530 GMT	313 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
			1	1017.9 MB	9.4 C	8.9 C	2/8 CC

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	10.497	10.497	33.247	25.499	247.3	0.000	0
10	10.465	10.464	33.301	25.547	243.0	0.025	10
20	10.188	10.186	33.345	25.629	235.4	0.048	20
30	9.953	9.950	33.413	25.722	226.8	0.072	30
40	8.381	8.377	33.767	26.249	176.7	0.092	40
50	8.230	8.225	33.804	26.301	172.0	0.109	50
75	7.957	7.950	33.870	26.394	163.6	0.151	76
100	7.666	7.656	33.932	26.485	155.4	0.191	101
125	7.318	7.306	33.988	26.579	146.7	0.229	126
150	7.105	7.091	34.015	26.630	142.3	0.265	151
175	7.009	6.993	34.024	26.651	140.7	0.300	176
200	6.896	6.878	34.034	26.675	138.8	0.335	202
225	6.850	6.829	34.038	26.684	138.2	0.370	227
250	6.232	6.210	34.094	26.810	126.4	0.403	252
264	6.120	6.097	34.103	26.832	124.5	0.420	266

CRUISE SQ87 LEG I STATION G 29

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
40 26.6 N	124 33.3 W	01/05/87	1647 GMT	90 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
180	08 KT	280 05 06	1	1020.7 MB	12.6 C	12.0 C	4/8 AC

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	10.196	10.196	33.356	25.635	234.3	0.000	0
10	9.986	9.985	33.365	25.678	230.5	0.023	10
20	9.887	9.885	33.385	25.710	227.6	0.046	20
30	9.433	9.430	33.521	25.892	210.6	0.068	30
40	9.339	9.335	33.539	25.921	207.9	0.089	40
50	9.035	9.030	33.611	26.026	198.2	0.109	50
75	8.490	8.482	33.733	26.207	181.5	0.157	76
86	8.405	8.396	33.756	26.238	178.7	0.177	87

STATION G 32 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
40 9.5 N	124 33.2 W	01/05/87	2214 GMT	668 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
210	05 KT		1	1021.7 MB	12.1 C	9.8 C	3/8 AC

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	11.342	11.342	33.019	25.172	278.3	0.000	0
10	10.549	10.548	33.007	25.303	266.1	0.027	10
20	10.299	10.297	33.021	25.357	261.2	0.054	20
30	9.517	9.514	33.232	25.652	233.3	0.078	30
40	9.004	9.000	33.440	25.897	210.2	0.100	40
50	8.640	8.635	33.567	26.053	195.6	0.121	50
75	8.223	8.215	33.840	26.331	169.6	0.166	76
100	7.839	7.829	33.918	26.449	158.8	0.207	101
125	7.595	7.583	33.955	26.514	153.0	0.246	126
150	7.288	7.274	33.977	26.575	147.6	0.284	151
175	7.092	7.076	33.979	26.604	145.1	0.321	176
200	6.915	6.897	34.002	26.647	141.4	0.356	202
225	6.604	6.584	34.021	26.704	136.3	0.391	227
250	6.401	6.379	34.033	26.740	133.1	0.425	252
275	6.376	6.352	34.036	26.746	132.9	0.458	277
300	6.150	6.124	34.049	26.786	129.4	0.491	302
350	5.869	5.839	34.091	26.854	123.3	0.554	353
400	5.361	5.328	34.118	26.938	115.7	0.614	403
450	5.126	5.090	34.156	26.996	110.6	0.670	454
500	4.869	4.830	34.211	27.069	104.0	0.724	504

CRUISE SQ87 LEG I STATION G 36

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
39 51.6 N	124 19.3 W	02/05/87	0316 GMT	1314 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
280	07 KT		1	1020.2 MB	11.1 C	10.3 C	1/8 AC

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	11.552	11.552	33.207	25.280	268.1	0.000	0
10	10.497	10.496	33.230	25.486	248.7	0.026	10
20	10.315	10.313	33.256	25.538	244.0	0.050	20
30	9.384	9.381	33.425	25.824	217.0	0.074	30
40	9.202	9.198	33.537	25.941	206.0	0.095	40
50	8.939	8.934	33.607	26.038	197.0	0.115	50
75	8.321	8.313	33.753	26.248	177.5	0.162	76
100	8.070	8.060	33.854	26.365	166.8	0.205	101
125	7.799	7.787	33.928	26.463	157.9	0.245	126
150	7.544	7.530	33.962	26.527	152.2	0.284	151
175	7.210	7.193	33.992	26.598	145.8	0.321	176
200	6.818	6.800	33.977	26.640	142.0	0.357	202
225	6.762	6.741	34.010	26.674	139.2	0.392	227
250	6.635	6.612	34.027	26.705	136.6	0.427	252
275	6.451	6.426	34.037	26.737	133.8	0.461	277
300	6.176	6.150	34.044	26.778	130.1	0.494	302
350	5.900	5.870	34.071	26.835	125.2	0.557	353
400	5.562	5.529	34.075	26.880	121.3	0.619	403
450	5.141	5.105	34.104	26.953	114.6	0.678	454
500	5.040	5.000	34.174	27.021	108.7	0.734	504
513	5.021	4.980	34.183	27.030	108.0	0.748	517

STATION G 38 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
39 42.4 N	124 13.6 W	02/05/87	0509 GMT	1280 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
280	06 KT		1	1021.0 MB	11.1 C	9.4 C	1/8 CU

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	12.135	12.135	32.785	24.844	309.6	0.000	0
10	10.234	10.233	33.197	25.505	246.9	0.028	10
20	9.935	9.933	33.338	25.666	231.9	0.052	20
30	9.769	9.766	33.479	25.804	219.0	0.074	30
40	9.377	9.373	33.532	25.909	209.1	0.096	40
50	9.122	9.117	33.570	25.980	202.6	0.116	50
75	8.169	8.161	33.663	26.200	182.0	0.164	76
100	8.063	8.053	33.842	26.357	167.6	0.208	101
125	7.843	7.831	33.903	26.437	160.4	0.249	126
150	7.612	7.597	33.962	26.517	153.1	0.288	151
175	7.275	7.258	33.974	26.575	148.0	0.326	176
200	6.987	6.968	34.004	26.639	142.3	0.362	202
225	6.876	6.855	34.018	26.665	140.1	0.397	227
250	6.552	6.530	34.020	26.710	136.0	0.432	252
275	6.312	6.288	34.034	26.753	132.2	0.466	277
300	6.214	6.188	34.050	26.778	130.1	0.498	302
350	5.915	5.885	34.078	26.839	124.9	0.562	353
400	5.715	5.681	34.113	26.891	120.4	0.623	403
450	5.355	5.318	34.134	26.952	115.0	0.682	454
500	5.092	5.052	34.174	27.014	109.4	0.738	504
511	5.021	4.980	34.184	27.031	107.9	0.750	515

CRUISE SQ87 LEG I STATION G 42

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
40 5.3 N	124 44.3 W	02/05/87	1352 GMT	988 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
160	11 KT	290 06 10	2	1022.8 MB	11.2 C	10.9 C	8/8 SC

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	10.714	10.714	33.351	25.542	243.2	0.000	0
10	10.635	10.634	33.355	25.560	241.7	0.024	10
20	10.418	10.416	33.374	25.612	237.0	0.048	20
30	9.328	9.325	33.556	25.936	206.4	0.070	30
40	8.935	8.931	33.655	26.076	193.2	0.090	40
50	8.704	8.699	33.732	26.173	184.2	0.109	50
75	8.000	7.993	33.790	26.325	170.2	0.154	76
100	7.795	7.785	33.889	26.433	160.3	0.195	101
125	7.438	7.426	33.959	26.540	150.5	0.234	126
150	7.252	7.238	33.994	26.594	145.8	0.271	151
175	6.926	6.910	33.994	26.639	141.8	0.307	176
200	6.735	6.717	34.013	26.680	138.3	0.342	202
225	6.455	6.435	34.025	26.727	134.1	0.376	227
250	6.157	6.135	34.024	26.764	130.7	0.409	252
275	5.760	5.737	33.995	26.791	128.2	0.441	277
300	5.876	5.850	34.053	26.823	125.6	0.473	302
350	5.444	5.415	34.045	26.870	121.5	0.535	353
400	5.458	5.425	34.120	26.928	116.7	0.594	403
450	5.195	5.159	34.173	27.001	110.1	0.651	454
496	5.000	4.960	34.193	27.040	106.8	0.701	500
500 E	4.985	4.945	34.194	27.042	106.6	0.705	504

STATION G 46 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
39 46.2 N	124 29.4 W	02/05/87	1936 GMT	1830 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
140	08 KT	290 07 10	2	1023.5 MB	11.1 C	10.8 C	8/8 SC

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	11.756	11.756	33.089	25.151	280.4	0.000	0
10	10.626	10.625	33.205	25.444	252.7	0.027	10
20	9.997	9.995	33.291	25.619	236.3	0.051	20
30	9.873	9.870	33.381	25.710	227.9	0.074	30
40	8.991	8.987	33.662	26.073	193.5	0.095	40
50	8.791	8.786	33.704	26.137	187.6	0.114	50
75	8.098	8.090	33.814	26.329	169.8	0.159	76
100	7.824	7.814	33.880	26.422	161.4	0.201	101
125	7.4	7.485	33.940	26.516	152.8	0.240	126
150	7.246	7.234	33.970	26.575	147.5	0.277	151
175	6.789	6.773	34.012	26.671	138.7	0.313	176
200	6.444	6.426	34.039	26.739	132.5	0.347	202
225	6.199	6.179	34.058	26.786	128.3	0.380	227
250	6.017	5.996	34.072	26.820	125.3	0.411	252
275	5.812	5.789	34.088	26.858	121.9	0.442	277
300	5.651	5.626	34.106	26.893	118.9	0.472	302
350	5.429	5.400	34.134	26.942	114.7	0.531	353
400	5.257	5.225	34.159	26.982	111.4	0.587	403
450	4.902	4.867	34.209	27.063	104.0	0.641	454
500	4.697	4.658	34.248	27.118	99.2	0.692	504
505	4.678	4.639	34.255	27.125	98.5	0.697	509

CRUISE SQ87 LEG I STATION G 48

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
39 39.0 N	124 21.8 W	02/05/87	2212 GMT	1795 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
260	07 KT		1	1023.8 MB	13.9 C	11.7 C	6/8 SC

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	12.592	12.592	32.713	24.701	323.2	0.000	0
10	10.918	10.917	32.908	25.162	279.6	0.030	10
20	10.455	10.453	33.211	25.479	249.7	0.057	20
30	10.125	10.122	33.319	25.619	236.5	0.081	30
40	9.676	9.672	33.422	25.775	221.9	0.104	40
50	9.024	9.019	33.581	26.004	200.3	0.125	50
75	8.338	8.330	33.751	26.244	177.9	0.172	76
100	8.081	8.071	33.870	26.376	165.8	0.215	101
125	7.692	7.680	33.936	26.485	155.8	0.255	126
150	7.430	7.416	33.963	26.544	150.5	0.294	151
175	7.250	7.233	33.997	26.596	145.9	0.331	176
200	6.883	6.865	33.991	26.643	141.8	0.367	202
225	6.674	6.654	34.002	26.679	138.6	0.402	227
250	6.289	6.267	33.986	26.718	135.2	0.436	252
275	6.247	6.223	34.022	26.751	132.3	0.469	277
300	6.207	6.181	34.068	26.793	128.7	0.502	302
350	5.886	5.856	34.088	26.850	123.8	0.565	353
400	5.588	5.555	34.110	26.904	119.0	0.626	403
450	5.214	5.178	34.133	26.967	113.3	0.684	454
493	4.922	4.883	34.175	27.034	107.2	0.731	497
500 E	4.875	4.836	34.178	27.042	106.5	0.739	504

STATION G 52 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
39 20.8 N	124 9.4 W	03/05/87	0311 GMT	890 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
320	10 KT		1	1023.1 MB	13.3 C	12.4 C	2/8 CI

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	12.607	12.607	32.493	24.528	339.7	0.000	0
10	12.335	12.334	32.565	24.636	329.6	0.033	10
20	12.159	12.156	32.552	24.659	327.7	0.066	20
30	12.097	12.093	32.556	24.674	326.5	0.099	30
40	11.475	11.470	32.556	24.789	315.7	0.131	40
50	11.418	11.412	32.739	24.942	301.4	0.162	50
75	9.780	9.772	32.990	25.421	256.3	0.232	76
100	8.471	8.461	33.396	25.946	206.7	0.290	101
125	8.409	8.396	33.651	26.156	187.2	0.339	126
150	7.934	7.919	33.875	26.402	164.1	0.383	151
175	7.708	7.691	33.951	26.495	155.7	0.423	176
200	7.443	7.424	33.977	26.554	150.5	0.461	202
225	7.244	7.223	33.996	26.597	146.7	0.498	227
250	6.976	6.953	34.010	26.646	142.4	0.534	252
275	6.802	6.777	34.021	26.678	139.6	0.570	277
300	6.550	6.523	34.045	26.731	134.9	0.604	302
350	6.076	6.046	34.050	26.796	129.0	0.670	353
400	5.721	5.687	34.080	26.865	122.9	0.733	403
450	5.199	5.163	34.081	26.928	117.0	0.793	454
500	5.121	5.081	34.143	26.987	112.0	0.850	504
510	5.163	5.122	34.170	27.003	110.6	0.861	514

CRUISE SQ87 LEG I STATION G 54

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
39 11.0 N	124 5.7 W	03/05/87	0459 GMT	831 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
320	15 KT			1023.9 MB	12.2 C	11.7 C	

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	12.435	12.435	32.465	24.539	338.6	0.000	0
10	11.929	11.928	32.458	24.629	330.3	0.033	10
20	11.768	11.765	32.463	24.663	327.3	0.066	20
30	11.036	11.032	32.507	24.829	311.7	0.098	30
40	10.689	10.684	32.683	25.027	293.0	0.129	40
50	10.678	10.672	32.765	25.093	287.0	0.158	50
75	8.973	8.965	33.224	25.733	226.5	0.222	76
100	9.169	9.158	33.466	25.892	211.9	0.276	101
125	8.772	8.759	33.847	26.253	178.1	0.325	126
150	8.237	8.222	33.889	26.368	167.5	0.368	151
175	7.970	7.952	33.938	26.447	160.4	0.409	176
200	7.701	7.682	33.983	26.522	153.7	0.449	202
225	7.431	7.409	34.006	26.579	148.5	0.486	227
250	7.153	7.129	34.024	26.632	143.7	0.523	252
275	6.981	6.955	34.040	26.669	140.6	0.559	277
300	6.715	6.688	34.060	26.721	135.9	0.593	302
350	6.501	6.469	34.080	26.765	132.3	0.660	353
400	6.150	6.115	34.117	26.840	125.6	0.725	403
450	5.673	5.635	34.138	26.917	118.6	0.786	454
500	5.407	5.365	34.188	26.989	112.2	0.843	504

STATION G 58 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 52.1 N	123 56.4 W	03/05/87	0905 GMT	343 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
340	14 KT			1022.5 MB	12.2 C	11.8 C	

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	10.599	10.599	33.232	25.470	250.1	0.000	0
10	10.596	10.595	33.241	25.478	249.6	0.025	10
20	10.239	10.237	33.222	25.524	245.3	0.050	20
30	9.698	9.695	33.327	25.697	229.1	0.073	30
40	9.114	9.110	33.449	25.886	211.2	0.095	40
50	8.494	8.489	33.726	26.200	181.6	0.115	50
75	8.230	8.222	33.951	26.417	161.5	0.158	76
100	8.230	8.220	33.989	26.447	159.1	0.198	101
125	8.186	8.173	33.987	26.453	159.0	0.238	126
150	7.996	7.981	33.996	26.488	156.0	0.277	151
175	7.998	7.980	34.022	26.509	154.6	0.316	176
200	7.796	7.776	34.017	26.535	152.5	0.354	202
225	7.183	7.162	34.051	26.649	141.8	0.391	227
250	7.130	7.106	34.081	26.680	139.2	0.426	252
275	6.905	6.879	34.090	26.719	135.8	0.461	277
300	6.860	6.832	34.092	26.727	135.5	0.495	302
334	6.547	6.517	34.100	26.775	131.2	0.540	337

CRUISE SQ87 LEG I STATION G 60

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 43.1 N	123 50.2 W	03/05/87	1106 GMT	406 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
340	22 KT		1	1021.2 MB	12.0 C	11.4 C	6/8 CC

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	11.057	11.057	33.156	25.330	263.3	0.000	0
10	10.791	10.790	33.289	25.481	249.2	0.026	10
20	9.481	9.479	33.560	25.914	208.2	0.049	20
30	9.156	9.153	33.653	26.039	196.5	0.069	30
40	8.944	8.940	33.745	26.145	186.6	0.088	40
50	8.645	8.640	33.779	26.219	179.9	0.106	50
75	8.279	8.271	33.838	26.321	170.6	0.150	76
100	7.849	7.839	33.924	26.453	158.5	0.191	101
125	7.718	7.706	33.940	26.485	155.9	0.230	126
150	7.529	7.515	33.978	26.542	150.8	0.269	151
175	7.329	7.312	33.994	26.583	147.2	0.306	176
200	7.067	7.048	34.002	26.626	143.5	0.342	202
225	6.894	6.873	34.017	26.662	140.4	0.378	227
250	6.789	6.766	34.084	26.729	134.4	0.412	252
275	6.688	6.663	34.094	26.751	132.6	0.446	277
300	6.466	6.439	34.111	26.794	128.8	0.478	302
350	6.341	6.310	34.117	26.815	127.4	0.542	353
383	5.893	5.860	34.140	26.891	120.4	0.583	386

STATION G 64 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 24.8 N	123 33.2 W	03/05/87	1525 GMT	171 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
330	20 KT		1	1021.2 MB	12.2 C	11.1 C	4/8 SC

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	11.558	11.558	32.530	24.753	318.3	0.000	0
10	11.553	11.552	32.528	24.753	318.5	0.032	10
20	11.416	11.414	32.554	24.798	314.5	0.063	20
30	11.402	11.398	32.759	24.960	299.3	0.094	30
40	11.834	11.829	32.956	25.034	292.5	0.124	40
50	10.550	10.544	32.968	25.273	269.9	0.152	50
75	9.429	9.421	33.257	25.687	230.9	0.214	76
100	8.817	8.806	33.591	26.045	197.3	0.268	101
125	8.578	8.565	33.756	26.212	181.9	0.315	126
150	8.164	8.149	33.901	26.389	165.5	0.359	151
175	7.773	7.756	34.013	26.535	152.0	0.399	176

CRUISE SQ87 LEG I STATION G 66

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 15.7 N	123 27.4 W	03/05/87	1650 GMT	274 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
320	22 KT		1	1021.1 MB	11.7 C	11.1 C	1/8 SC

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	11.282	11.282	32.658	24.902	304.1	0.000	0
10	11.215	11.214	32.684	24.935	301.2	0.030	10
20	11.123	11.121	32.738	24.993	295.9	0.060	20
30	10.985	10.981	32.828	25.088	287.1	0.089	30
40	10.876	10.871	32.919	25.178	278.7	0.118	40
50	10.674	10.668	33.096	25.352	262.4	0.145	50
75	9.107	9.099	33.524	25.947	206.2	0.203	76
100	8.695	8.685	33.822	26.245	178.3	0.251	101
125	8.538	8.525	33.967	26.384	165.7	0.294	126
150	8.526	8.510	33.984	26.399	164.7	0.336	151
175	8.430	8.412	34.002	26.428	162.3	0.376	176
200	8.359	8.338	34.017	26.451	160.6	0.417	202
225	8.312	8.289	34.021	26.462	160.1	0.457	227
245	8.229	8.204	34.026	26.479	158.8	0.489	247

STATION G 67 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 6.5 N	123 34.4 W	03/05/87	1820 GMT	964 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
320	21 KT		1	1020.8 MB	12.8 C	11.7 C	5/8 SC

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	11.366	11.366	32.798	24.996	295.1	0.000	0
10	11.306	11.305	32.829	25.031	292.0	0.029	10
20	11.088	11.086	32.959	25.172	278.9	0.058	20
30	10.900	10.896	33.114	25.326	264.5	0.085	30
40	10.847	10.842	33.126	25.345	262.9	0.111	40
50	10.828	10.822	33.130	25.351	262.5	0.138	50
75	9.894	9.886	33.293	25.638	235.6	0.200	76
100	9.293	9.282	33.393	25.815	219.2	0.257	101
125	8.508	8.495	33.700	26.179	185.0	0.307	126
150	8.137	8.122	33.857	26.358	168.4	0.352	151
175	8.031	8.013	33.933	26.434	161.6	0.393	176
200	7.765	7.745	33.952	26.488	156.8	0.433	202
225	7.598	7.576	33.976	26.531	153.1	0.471	227
250	7.274	7.250	33.989	26.588	148.0	0.509	252
275	7.118	7.092	33.997	26.616	145.7	0.546	277
300	6.808	6.780	34.014	26.672	140.6	0.581	302
350	6.419	6.388	34.057	26.758	132.9	0.650	353
400	5.966	5.931	34.053	26.813	128.0	0.715	403
450	5.617	5.579	34.090	26.885	121.5	0.777	454
466	5.495	5.456	34.092	26.902	120.0	0.797	470

CRUISE SQ87 LEG I STATION G 71

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 26.2 N	123 47.0 W	04/05/87	0018 GMT	1533 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
340	25 KT		1	1018.2 MB	13.0 C	11.8 C	2/8 CU

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	11.641	11.641	32.523	24.732	320.2	0.000	0
10	11.636	11.635	32.526	24.736	320.1	0.032	10
20	11.632	11.630	32.528	24.739	320.1	0.064	20
30	11.535	11.531	32.530	24.758	318.5	0.096	30
40	11.281	11.276	32.615	24.870	308.0	0.127	40
50	10.744	10.738	32.808	25.115	284.9	0.157	50
75	9.595	9.587	33.497	25.847	215.7	0.220	76
100	9.138	9.127	33.731	26.104	191.7	0.270	101
125	8.922	8.909	33.849	26.231	180.2	0.317	126
150	8.110	8.095	33.844	26.352	169.0	0.361	151
175	7.818	7.801	33.928	26.461	159.0	0.402	176
200	7.460	7.441	33.967	26.544	151.5	0.440	202
225	7.288	7.267	33.988	26.585	147.9	0.478	227
250	7.025	7.002	33.996	26.628	144.1	0.514	252
275	6.742	6.717	34.018	26.684	139.0	0.550	277
300	6.280	6.254	34.000	26.730	134.7	0.584	302
350	6.040	6.010	34.049	26.800	128.6	0.650	353
400	5.752	5.718	34.075	26.857	123.7	0.713	403
450	5.536	5.498	34.111	26.912	118.9	0.773	454
500	5.238	5.197	34.136	26.968	114.0	0.832	504
510	5.220	5.178	34.146	26.978	113.1	0.843	514

STATION G 73 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 35.3 N	123 54.0 W	04/05/87	0225 GMT	1636 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
330	22 KT	330 09 07	0	1020.1 MB	12.6 C	12.1 C	0/8

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	11.255	11.255	33.306	25.411	255.6	0.000	0
10	11.262	11.261	33.308	25.412	255.8	0.026	10
20	10.480	10.478	33.370	25.598	238.3	0.050	20
30	9.768	9.765	33.490	25.812	218.1	0.073	30
40	9.524	9.520	33.529	25.883	211.6	0.095	40
50	9.156	9.151	33.597	25.996	201.1	0.115	50
75	8.510	8.502	33.682	26.164	185.5	0.164	76
100	8.219	8.209	33.810	26.308	172.2	0.208	101
125	8.060	8.047	33.901	26.404	163.6	0.250	126
150	7.797	7.782	33.990	26.513	153.7	0.290	151
175	7.345	7.328	33.985	26.574	148.2	0.328	176
200	7.047	7.028	34.010	26.635	142.6	0.364	202
225	6.701	6.681	34.019	26.689	137.7	0.399	227
250	6.475	6.453	34.033	26.730	134.1	0.433	252
275	6.258	6.234	34.039	26.764	131.2	0.466	277
300	6.121	6.095	34.044	26.785	129.4	0.499	302
350	5.978	5.948	34.082	26.834	125.4	0.562	353
400	5.850	5.816	34.130	26.888	120.8	0.624	403
450	5.338	5.301	34.143	26.961	114.1	0.683	454
500	5.188	5.147	34.188	27.014	109.5	0.739	504
511	5.115	5.074	34.196	27.029	108.1	0.751	515

CRUISE SQ87 LEG I STATION G 77

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 52.8 N	124 7.6 W	04/05/87	0728 GMT	1522 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
330	24 KT			1019.7 MB	10.6 C	10.3 C	

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	11.498	11.498	32.532	24.765	317.1	0.000	0
10	11.480	11.479	32.537	24.773	316.6	0.032	10
20	11.276	11.274	32.554	24.823	312.0	0.063	20
30	10.442	10.439	32.653	25.046	291.0	0.093	30
40	9.732	9.728	33.128	25.536	244.6	0.120	40
50	10.007	10.001	33.333	25.650	234.0	0.144	50
75	8.925	8.917	33.559	26.003	200.9	0.198	76
100	8.382	8.372	33.946	26.390	164.5	0.244	101
125	8.058	8.045	33.957	26.448	159.4	0.284	126
150	7.920	7.905	33.987	26.492	155.6	0.324	151
175	7.902	7.885	33.994	26.501	155.2	0.363	176
200	7.855	7.835	34.001	26.514	154.5	0.401	202
225	7.692	7.670	34.016	26.550	151.4	0.440	227
250	7.473	7.449	34.026	26.589	148.0	0.477	252
275	7.176	7.150	34.042	26.644	143.1	0.514	277
300	6.777	6.749	34.068	26.719	136.1	0.548	302
350	6.260	6.229	34.105	26.816	127.3	0.614	353
400	5.960	5.925	34.111	26.860	123.6	0.677	403
450	5.835	5.796	34.150	26.906	119.8	0.738	454
500	5.714	5.671	34.169	26.937	117.4	0.797	504
514	5.673	5.629	34.172	26.944	116.8	0.814	518

STATION G 79 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
39 2.3 N	124 14.1 W	04/05/87	0929 GMT	1789 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
330	25 KT			1019.8 MB	12.1 C	11.0 C	

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	12.149	12.149	32.501	24.621	330.8	0.000	0
10	12.140	12.139	32.502	24.624	330.8	0.033	10
20	12.144	12.141	32.502	24.624	331.1	0.066	20
30	12.141	12.137	32.503	24.625	331.2	0.099	30
40	11.502	11.497	32.610	24.826	312.2	0.131	40
50	10.807	10.801	32.609	24.949	300.7	0.162	50
75	9.939	9.931	32.990	25.395	258.8	0.232	76
100	8.850	8.839	33.401	25.891	211.9	0.291	101
125	8.505	8.492	33.699	26.178	185.1	0.340	126
150	8.189	8.174	33.826	26.326	171.4	0.385	151
175	7.889	7.872	33.916	26.441	160.9	0.427	176
200	7.594	7.575	33.941	26.504	155.3	0.466	202
225	7.486	7.464	33.971	26.543	151.9	0.505	227
250	7.111	7.087	33.995	26.615	145.4	0.542	252
275	6.872	6.847	34.008	26.658	141.5	0.578	277
300	6.665	6.638	34.013	26.690	138.7	0.613	302
350	6.421	6.390	34.043	26.747	134.0	0.681	353
400	6.032	5.997	34.075	26.822	127.2	0.746	403
450	5.630	5.592	34.089	26.883	121.7	0.808	454
500	5.455	5.413	34.141	26.946	116.3	0.868	504
509	5.417	5.375	34.147	26.955	115.5	0.878	513

CRUISE SQ87 LEG I STATION G 83

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
39 19.6 N	124 26.5 W	04/05/87	1430 GMT	2716 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
340	29 KT		1	1020.8 MB	10.6 C	10.3 C	1/8 CC

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	11.709	11.709	32.457	24.669	326.3	0.000	0
10	11.710	11.709	32.456	24.668	326.6	0.033	10
20	11.706	11.704	32.456	24.669	326.8	0.065	20
30	11.696	11.692	32.468	24.680	325.9	0.098	30
40	11.668	11.663	32.643	24.822	312.7	0.130	40
50	11.453	11.447	32.743	24.939	301.8	0.161	50
75	10.053	10.044	32.880	25.290	268.8	0.232	76
100	9.054	9.043	33.337	25.809	219.7	0.293	101
125	8.367	8.354	33.662	26.170	185.8	0.344	126
150	8.246	8.231	33.837	26.326	171.5	0.388	151
175	7.798	7.781	33.927	26.463	158.8	0.430	176
200	7.578	7.559	33.950	26.513	154.4	0.469	202
225	7.365	7.343	33.978	26.566	149.7	0.507	227
250	6.952	6.929	34.012	26.650	141.9	0.543	252
275	6.742	6.717	34.025	26.689	138.5	0.578	277
300	6.450	6.423	34.031	26.733	134.6	0.612	302
350	6.092	6.062	34.069	26.809	127.8	0.678	353
400	5.486	5.453	34.055	26.873	121.9	0.740	403
450	5.153	5.117	34.080	26.932	116.6	0.800	454
500	4.980	4.940	34.141	27.001	110.5	0.857	504
512	4.947	4.906	34.152	27.014	109.4	0.870	516

STATION G 85 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
39 28.0 N	124 32.2 W	04/05/87	1704 GMT	2550 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
340	28 KT		1	1020.6 MB	10.6 C	10.3 C	2/8 CI

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	11.093	11.093	33.151	25.320	264.3	0.000	0
10	11.082	11.081	33.151	25.322	264.4	0.026	10
20	10.857	10.855	33.223	25.418	255.5	0.052	20
30	9.965	9.962	33.353	25.673	231.4	0.077	30
40	9.085	9.081	33.334	25.801	219.3	0.099	40
50	8.875	8.870	33.375	25.866	213.3	0.121	50
75	8.869	8.861	33.611	26.052	196.2	0.172	76
100	8.400	8.390	33.762	26.243	178.4	0.219	101
125	7.873	7.861	33.907	26.436	160.5	0.261	126
150	7.548	7.533	33.971	26.534	151.6	0.300	151
175	7.319	7.302	33.994	26.584	147.1	0.338	176
200	7.099	7.080	34.008	26.626	143.5	0.374	202
225	6.659	6.639	34.009	26.687	137.9	0.409	227
250	6.323	6.301	34.002	26.726	134.4	0.443	252
275	6.132	6.108	34.009	26.756	131.8	0.476	277
300	6.034	6.008	34.032	26.787	129.2	0.509	302
350	5.881	5.851	34.102	26.862	122.7	0.572	353
400	5.562	5.529	34.135	26.927	116.8	0.632	403
450	5.273	5.236	34.163	26.984	111.8	0.689	454
500	5.046	5.006	34.196	27.037	107.2	0.744	504
518	4.817	4.776	34.185	27.054	105.4	0.763	523

CRUISE SQ87 LEG I STATION G 89

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
39 46.6 N	124 46.2 W	04/05/87	2251 GMT	2961 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
340	31 KT		1	1019.2 MB	11.1 C	10.6 C	2/8 C

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	11.087	11.087	33.185	25.347	261.7	0.000	0
10	11.101	11.100	33.184	25.344	262.2	0.026	10
20	10.964	10.962	33.216	25.394	257.8	0.052	20
30	9.860	9.857	33.409	25.734	225.6	0.076	30
40	9.446	9.442	33.483	25.860	213.8	0.098	40
50	9.231	9.226	33.524	25.927	207.6	0.119	50
75	8.467	8.459	33.719	26.199	182.2	0.168	76
100	7.847	7.837	33.872	26.412	162.3	0.211	101
125	7.521	7.509	33.948	26.519	152.5	0.251	126
150	7.419	7.405	33.974	26.554	149.6	0.288	151
175	7.159	7.143	33.997	26.609	144.7	0.325	176
200	6.899	6.881	34.007	26.653	140.9	0.361	202
225	6.713	6.693	34.020	26.688	137.8	0.396	227
250	6.449	6.427	34.036	26.736	133.5	0.430	252
275	6.161	6.137	34.060	26.792	128.4	0.462	277
300	5.967	5.941	34.075	26.829	125.1	0.494	302
350	5.661	5.632	34.115	26.899	119.0	0.555	353
400	5.277	5.245	34.134	26.960	113.4	0.613	403
450	5.116	5.080	34.171	27.009	109.3	0.669	454
500	4.854	4.815	34.210	27.070	103.9	0.722	504
510	4.850	4.810	34.212	27.072	103.7	0.732	514

STATION G 91 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
39 55.5 N	124 52.5 W	05/05/87	0101 GMT	M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
340	30 KT		1	1018.7 MB	12.6 C	11.3 C	1/8 CC

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	11.126	11.126	33.147	25.311	265.2	0.000	0
10	11.123	11.122	33.146	25.311	265.4	0.027	10
20	10.888	10.886	33.179	25.378	259.2	0.053	20
30	9.383	9.380	33.401	25.806	218.7	0.077	30
40	9.063	9.059	33.550	25.974	202.9	0.098	40
50	8.822	8.817	33.640	26.082	192.9	0.118	50
75	8.255	8.247	33.798	26.293	173.2	0.163	76
100	7.762	7.752	33.904	26.449	158.7	0.205	101
125	7.481	7.469	33.961	26.535	151.0	0.244	126
150	7.218	7.204	33.996	26.600	145.2	0.281	151
175	6.985	6.969	34.014	26.646	141.1	0.316	176
200	6.742	6.724	34.027	26.690	137.3	0.351	202
225	6.521	6.501	34.038	26.728	134.0	0.385	227
250	6.335	6.313	34.052	26.764	130.8	0.418	252
275	6.208	6.184	34.064	26.790	128.7	0.451	277
300	5.943	5.917	34.086	26.841	124.0	0.482	302
350	5.651	5.622	34.109	26.896	119.3	0.543	353
400	5.449	5.416	34.131	26.938	115.7	0.602	403
450	5.187	5.151	34.160	26.992	111.0	0.658	454
500	4.94_	4.905	34.195	27.048	106.0	0.713	504
512	4.858	4.818	34.203	27.064	104.5	0.725	516

CRUISE SQ87 LEG I STATION G 93

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
39 55.0 N	125 8.5 W	05/05/87	0318 GMT	3551 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
360	25 KT			1021.0 MB	11.3 C	11.1 C	

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	11.673	11.673	33.110	25.183	277.4	0.000	0
10	11.659	11.658	33.117	25.191	276.8	0.028	10
20	11.193	11.191	33.212	25.350	262.0	0.055	20
30	10.651	10.647	33.286	25.503	247.6	0.080	30
40	10.183	10.178	33.301	25.596	238.9	0.104	40
50	9.890	9.884	33.399	25.721	227.2	0.128	50
75	8.787	8.779	33.550	26.018	199.5	0.181	76
100	8.178	8.168	33.795	26.303	172.7	0.228	101
125	7.825	7.813	33.916	26.450	159.1	0.269	126
150	7.376	7.362	33.980	26.565	148.5	0.308	151
175	7.053	7.037	34.000	26.626	143.1	0.344	176
200	6.864	6.846	34.008	26.658	140.3	0.379	202
225	6.459	6.439	33.991	26.699	136.6	0.414	227
250	6.378	6.356	34.014	26.728	134.2	0.448	252
275	6.249	6.225	34.043	26.768	130.7	0.481	277
300	6.098	6.072	34.066	26.806	127.4	0.513	302
350	5.755	5.725	34.088	26.866	122.1	0.576	353
400	5.602	5.569	34.117	26.908	118.7	0.636	403
450	5.286	5.249	34.156	26.977	112.5	0.694	454
500	5.050	5.010	34.202	27.042	106.8	0.748	504
511	5.031	4.990	34.207	27.048	106.3	0.760	515

STATION G 97 RV NEW HORIZON CRUISE SQ87 LEG I STATION G 99

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
39 37.0 N	124 53.7 W	05/05/87	0817 GMT	2535 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
340	25 KT	340 06 06		1019.2 MB	13.0 C	11.8 C	

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	11.114	11.114	33.330	25.455	251.4	0.000	0
10	11.118	11.117	33.331	25.456	251.7	0.025	10
20	11.120	11.118	33.332	25.456	251.8	0.050	20
30	10.874	10.870	33.325	25.495	248.4	0.075	30
40	10.361	10.356	33.342	25.597	238.8	0.100	40
50	9.862	9.856	33.382	25.713	228.0	0.123	50
75	9.476	9.468	33.516	25.882	212.5	0.178	76
100	8.691	8.681	33.664	26.122	190.0	0.228	101
125	8.287	8.274	33.808	26.297	173.8	0.274	126
150	7.850	7.835	33.914	26.445	160.1	0.316	151
175	7.441	7.424	33.953	26.535	151.8	0.355	176
200	7.235	7.216	33.968	26.576	148.3	0.392	202
225	7.009	6.988	34.021	26.649	141.7	0.428	227
250	6.758	6.735	34.038	26.697	137.4	0.463	252
275	6.490	6.465	34.058	26.749	132.7	0.497	277
300	6.329	6.302	34.067	26.777	130.3	0.530	302
350	5.797	5.767	34.081	26.855	123.2	0.593	353
400	5.478	5.445	34.100	26.910	118.4	0.654	403
450	5.298	5.261	34.136	26.960	114.1	0.712	454
500	5.202	5.161	34.193	27.017	109.3	0.768	504
513	5.123	5.081	34.199	27.031	108.0	0.782	517

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
39 28.0 N	124 47.3 W	05/05/87	0933 GMT	2802 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
340	30 KT	340 06 08		1018.2 MB	12.8 C	11.9 C	

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	11.110	11.110	32.536	24.838	310.2	0.000	0
10	11.090	11.089	32.533	24.840	310.2	0.031	10
20	11.099	11.097	32.534	24.839	310.5	0.062	20
30	11.105	11.101	32.535	24.839	310.8	0.093	30
40	11.407	11.402	32.694	24.909	304.4	0.124	40
50	11.575	11.569	32.845	24.996	296.3	0.154	50
75	9.999	9.990	33.108	25.477	251.0	0.222	76
100	9.100	9.089	33.533	25.956	205.9	0.279	101
125	8.592	8.579	33.691	26.159	186.9	0.329	126
150	8.081	8.066	33.906	26.405	163.9	0.372	151
175	7.836	7.819	33.953	26.478	157.4	0.413	176
200	7.665	7.645	33.983	26.527	153.1	0.451	202
225	7.382	7.360	34.000	26.581	148.3	0.489	227
250	7.140	7.116	34.002	26.617	145.2	0.526	252
275	6.752	6.727	33.986	26.657	141.5	0.562	277
300	6.547	6.520	34.004	26.699	137.8	0.597	302
350	6.052	6.022	34.022	26.777	130.8	0.664	353
400	5.815	5.781	34.084	26.856	123.8	0.727	403
450	5.491	5.454	34.099	26.908	119.2	0.788	454
500	5.140	5.100	34.123	26.969	113.7	0.846	504
512	5.128	5.087	34.133	26.978	113.0	0.860	516

STATION G 103 RV NEW HORIZON CRUISE SQ87 LEG I STATION G 105

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
39 10.5 N	124 35.2 W	05/05/87	1349 GMT	3279 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
340	25 KT	340 07 07	0	1016.2 MB	13.5 C	13.0 C	0/8

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	12.518	12.518	32.616	24.641	329.0	0.000	0
10	12.526	12.525	32.626	24.647	328.6	0.033	10
20	12.528	12.525	32.626	24.647	328.9	0.066	20
30	12.530	12.526	32.626	24.647	329.2	0.099	30
40	12.389	12.384	32.685	24.720	322.5	0.131	40
50	11.940	11.934	32.748	24.853	309.9	0.163	50
75	11.961	11.951	32.989	25.037	293.1	0.238	76
100	9.898	9.887	33.288	25.635	236.5	0.304	101
125	8.544	8.531	33.513	26.027	199.5	0.359	126
150	8.552	8.536	33.781	26.236	180.1	0.406	151
175	8.077	8.059	33.883	26.388	166.0	0.450	176
200	7.910	7.890	33.937	26.455	160.1	0.490	202
225	7.621	7.599	33.971	26.524	153.8	0.530	227
250	7.437	7.413	33.986	26.563	150.5	0.568	252
275	7.168	7.142	33.999	26.611	146.2	0.605	277
300	6.986	6.958	34.007	26.642	143.5	0.641	302
350	6.597	6.565	34.045	26.725	136.2	0.711	353
400	6.127	6.092	34.064	26.802	129.2	0.777	403
450	5.556	5.518	34.088	26.891	120.9	0.840	454
500	5.304	5.263	34.102	26.933	117.3	0.899	504
512	5.162	5.120	34.112	26.957	114.9	0.913	516

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
39 2.0 N	124 28.1 W	05/05/87	1552 GMT	3354 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
340	25 KT	340 07 06	0	1015.9 MB	14.2 C	13.7 C	0/8

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	12.574	12.574	32.639	24.647	328.3	0.000	0
10	12.565	12.564	32.640	24.650	328.3	0.033	10
20	12.556	12.553	32.639	24.652	328.4	0.066	20
30	12.554	12.550	32.639	24.652	328.7	0.099	30
40	12.544	12.539	32.640	24.655	328.6	0.131	40
50	11.978	11.972	32.694	24.804	314.6	0.164	50
75	10.625	10.616	32.852	25.171	280.2	0.238	76
100	9.674	9.663	33.199	25.602	239.6	0.303	101
125	8.842	8.829	33.526	25.991	202.9	0.358	126
150	8.472	8.456	33.708	26.191	184.3	0.407	151
175	8.192	8.174	33.840	26.337	170.9	0.451	176
200	7.888	7.868	33.899	26.429	162.5	0.493	202
225	7.609	7.587	33.952	26.511	155.0	0.532	227
250	7.254	7.230	33.954	26.563	150.3	0.571	252
275	7.106	7.080	33.993	26.615	145.8	0.608	277
300	6.777	6.749	34.014	26.676	140.2	0.643	302
350	6.293	6.262	34.043	26.763	132.3	0.711	353
400	5.981	5.946	34.059	26.816	127.8	0.776	403
450	5.560	5.522	34.079	26.884	121.6	0.839	454
500	5.288	5.247	34.108	26.939	116.6	0.898	504
509	5.288	5.246	34.133	26.959	114.9	0.909	513

STATION G 109 RV NEW HORIZON CRUISE SQ87 LEG I STATION G 111

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 43.8 N	124 16.0 W	05/05/87	2135 GMT	1729 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
340	16 KT	350 07 08	0	1015.9 MB	14.8 C	12.9 C	0/8

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	12.066	12.066	32.509	24.643	328.7	0.000	0
10	11.977	11.976	32.511	24.662	327.2	0.033	10
20	11.763	11.760	32.520	24.708	323.0	0.065	20
30	11.484	11.480	32.527	24.765	317.9	0.097	30
40	10.608	10.603	32.579	24.960	299.4	0.128	40
50	10.340	10.334	32.895	25.252	271.8	0.157	50
75	9.333	9.325	33.222	25.675	232.1	0.220	76
100	9.155	9.144	33.666	26.051	196.8	0.273	101
125	8.305	8.292	33.814	26.299	173.6	0.320	126
150	8.242	8.227	33.942	26.409	163.6	0.362	151
175	7.981	7.963	33.999	26.493	156.0	0.402	176
200	7.985	7.965	34.020	26.510	154.9	0.441	202
225	7.563	7.541	33.988	26.546	151.7	0.479	227
250	7.275	7.251	33.991	26.589	147.9	0.516	252
275	6.949	6.923	34.008	26.648	142.6	0.553	277
300	6.822	6.794	34.019	26.674	140.4	0.588	302
350	6.300	6.269	34.038	26.758	132.8	0.656	353
400	5.960	5.925	34.080	26.835	125.9	0.721	403
450	5.723	5.685	34.133	26.907	119.6	0.782	454
500	5.386	5.345	34.166	26.974	113.5	0.841	504
511	5.363	5.321	34.167	26.978	113.3	0.853	515

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 35.1 N	124 8.8 W	05/05/87	2319 GMT	1994 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
330	13 KT			1015.2 MB	14.8 C	13.0 C	

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	11.212	11.212	33.322	25.431	253.7	0.000	0
10	10.790	10.789	33.330	25.513	246.2	0.025	10
20	10.465	10.463	33.346	25.582	239.8	0.049	20
30	10.222	10.219	33.412	25.675	231.2	0.073	30
40	10.173	10.168	33.419	25.689	230.0	0.096	40
50	9.225	9.220	33.468	25.884	211.7	0.118	50
75	8.671	8.663	33.694	26.148	187.0	0.168	76
100	8.500	8.490	33.810	26.266	176.4	0.213	101
125	8.155	8.142	33.890	26.381	165.8	0.256	126
150	7.892	7.877	33.958	26.474	157.4	0.296	151
175	7.527	7.510	33.996	26.557	149.8	0.335	176
200	7.095	7.076	34.014	26.632	143.0	0.371	202
225	6.968	6.947	34.017	26.652	141.4	0.407	227
250	6.787	6.764	34.008	26.669	140.0	0.442	252
275	6.550	6.525	34.051	26.735	134.1	0.476	277
300	6.249	6.223	34.057	26.779	130.1	0.509	302
350	5.747	5.717	34.066	26.850	123.7	0.573	353
400	5.618	5.584	34.085	26.881	121.2	0.634	403
450	5.393	5.356	34.133	26.947	115.5	0.693	454
500	5.273	5.232	34.187	27.004	110.6	0.750	504
510	5.175	5.134	34.189	27.017	109.4	0.761	514

STATION G 115 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 15.8 N	123 55.1 W	06/05/87	0335 GMT	2317 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
330	10 KT			1014.9 MB	12.2 C	11.7 C	

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	12.703	12.703	32.564	24.565	336.2	0.000	0
10	12.712	12.711	32.563	24.562	336.7	0.034	10
20	12.691	12.688	32.561	24.565	336.7	0.067	20
30	12.578	12.574	32.556	24.583	335.2	0.101	30
40	12.671	12.666	32.804	24.758	318.8	0.134	40
50	12.279	12.273	32.804	24.833	311.9	0.165	50
75	10.661	10.652	32.932	25.227	274.8	0.238	76
100	9.680	9.669	33.417	25.771	223.5	0.301	101
125	9.001	8.988	33.614	26.035	198.8	0.354	126
150	8.766	8.750	33.799	26.217	182.0	0.401	151
175	8.397	8.379	33.905	26.357	169.1	0.445	176
200	8.009	7.989	33.977	26.472	158.5	0.486	202
225	7.673	7.651	34.000	26.540	152.4	0.525	227
250	7.198	7.174	33.994	26.602	146.6	0.562	252
275	6.958	6.932	34.016	26.653	142.1	0.598	277
300	6.341	6.314	33.980	26.707	137.0	0.633	302
350	6.037	6.007	34.022	26.779	130.6	0.700	353
400	5.824	5.790	34.091	26.861	123.4	0.764	403
450	5.509	5.471	34.116	26.919	118.2	0.824	454
500	5.309	5.268	34.161	26.979	113.0	0.882	504
509	5.276	5.234	34.167	26.988	112.2	0.892	513

CRUISE SQ87 LEG I STATION G 117

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 6.3 N	123 48.9 W	06/05/87	0516 GMT	3001 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
320	12 KT			1016.4 MB	11.7 C	11.4 C	

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	12.571	12.571	32.551	24.580	334.8	0.000	0
10	12.566	12.565	32.551	24.581	334.9	0.033	10
20	12.412	12.409	32.557	24.615	331.9	0.067	20
30	12.361	12.357	32.562	24.629	330.8	0.100	30
40	12.423	12.418	32.599	24.646	329.4	0.133	40
50	11.996	11.990	32.841	24.915	304.1	0.165	50
75	11.205	11.196	33.006	25.188	278.6	0.237	76
100	9.853	9.842	33.323	25.669	233.2	0.301	101
125	8.821	8.808	33.530	25.998	202.3	0.356	126
150	8.173	8.158	33.772	26.286	175.2	0.403	151
175	7.970	7.953	33.900	26.417	163.2	0.445	176
200	7.689	7.669	33.959	26.505	155.3	0.485	202
225	7.525	7.503	33.990	26.553	151.0	0.523	227
250	7.254	7.230	33.993	26.594	147.4	0.561	252
275	6.777	6.752	33.991	26.658	141.5	0.597	277
300	6.464	6.437	33.997	26.704	137.3	0.632	302
350	6.246	6.215	34.056	26.779	130.7	0.699	353
400	6.006	5.971	34.073	26.824	127.0	0.763	403
450	5.615	5.577	34.100	26.894	120.7	0.825	454
500	5.491	5.449	34.137	26.938	117.0	0.885	504
518	5.452	5.409	34.161	26.962	114.9	0.905	522

STATION G 120 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
37 56.2 N	123 57.5 W	06/05/87	0805 GMT	4395 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
320	11 KT			1015.9 MB	14.8 C	13.4 C	

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	12.731	12.731	32.567	24.562	336.5	0.000	0
10	12.729	12.728	32.568	24.563	336.6	0.034	10
20	12.732	12.729	32.568	24.563	336.9	0.067	20
30	12.578	12.574	32.573	24.596	334.0	0.101	30
40	12.539	12.534	32.578	24.608	333.1	0.134	40
50	11.794	11.788	32.695	24.839	311.3	0.166	50
75	11.756	11.747	32.898	25.004	296.1	0.242	76
100	10.346	10.334	33.119	25.427	256.3	0.311	101
125	9.092	9.079	33.439	25.884	213.1	0.370	126
150	8.527	8.511	33.756	26.220	181.6	0.419	151
175	8.435	8.417	33.893	26.342	170.5	0.463	176
200	7.978	7.958	33.945	26.452	160.4	0.505	202
225	7.503	7.481	33.942	26.518	154.3	0.544	227
250	7.160	7.136	33.977	26.594	147.3	0.582	252
275	7.037	7.011	33.998	26.628	144.4	0.618	277
300	6.771	6.743	34.018	26.680	139.8	0.654	302
350	6.384	6.353	34.041	26.750	133.6	0.722	353
400	6.124	6.089	34.093	26.825	127.1	0.787	403
450	5.899	5.860	34.150	26.898	120.6	0.849	454
500	5.174	5.133	34.100	26.946	115.9	0.908	504
512	5.231	5.189	34.134	26.967	114.2	0.922	516

CRUISE SQ87 LEG I STATION G 124

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 15.8 N	124 10.7 W	06/05/87	1230 GMT	4419 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
320	09 KT	320 04 05		1015.8 MB	14.0 C	13.0 C	

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	12.187	12.187	32.490	24.606	332.3	0.000	0
10	12.183	12.182	32.492	24.608	332.3	0.033	10
20	12.179	12.176	32.492	24.609	332.5	0.066	20
30	12.164	12.160	32.492	24.612	332.4	0.100	30
40	12.594	12.589	32.814	24.781	316.7	0.132	40
50	12.194	12.188	32.796	24.843	310.9	0.164	50
75	10.518	10.509	32.972	25.283	269.5	0.236	76
100	9.282	9.271	33.361	25.792	221.4	0.297	101
125	9.217	9.203	33.665	26.041	198.4	0.350	126
150	8.928	8.912	33.807	26.198	183.8	0.398	151
175	8.395	8.377	33.933	26.380	167.0	0.442	176
200	8.171	8.151	33.992	26.460	159.7	0.482	202
225	7.741	7.719	33.999	26.529	153.4	0.522	227
250	7.574	7.550	34.021	26.571	149.8	0.559	252
275	7.202	7.176	34.012	26.616	145.7	0.596	277
300	6.998	6.970	34.020	26.651	142.7	0.632	302
350	6.181	6.150	34.002	26.745	133.9	0.702	353
400	5.622	5.589	34.009	26.820	127.0	0.767	403
450	5.387	5.350	34.048	26.880	121.8	0.829	454
500	5.499	5.457	34.149	26.947	116.2	0.888	504
517	5.435	5.392	34.169	26.970	114.2	0.908	521

STATION G 126 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 24.8 N	124 17.2 W	06/05/87	1417 GMT	3657 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
320	09 KT	320 03 05	0	1015.9 MB	13.9 C	13.7 C	0/8

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	12.108	12.108	32.474	24.608	332.1	0.000	0
10	12.103	12.102	32.477	24.612	332.0	0.033	10
20	12.090	12.087	32.475	24.613	332.1	0.066	20
30	11.879	11.875	32.470	24.648	329.0	0.099	30
40	11.400	11.395	32.617	24.850	309.9	0.131	40
50	11.096	11.090	32.624	24.910	304.4	0.162	50
75	10.273	10.264	32.941	25.300	267.8	0.234	76
100	8.779	8.769	33.274	25.803	220.3	0.295	101
125	8.968	8.955	33.696	26.104	192.2	0.346	126
150	8.590	8.574	33.865	26.296	174.4	0.392	151
175	8.156	8.138	33.949	26.428	162.3	0.434	176
200	7.928	7.908	33.991	26.495	156.3	0.474	202
225	7.541	7.519	34.012	26.568	149.6	0.512	227
250	7.293	7.269	34.030	26.617	145.3	0.549	252
275	6.981	6.955	34.022	26.655	141.9	0.585	277
300	6.889	6.861	34.053	26.692	138.8	0.620	302
350	6.094	6.064	34.028	26.777	130.9	0.687	353
400	5.928	5.894	34.082	26.841	125.4	0.752	403
450	5.679	5.641	34.116	26.899	120.3	0.813	454
500	5.018	4.978	34.091	26.957	114.7	0.872	504
511	4.959	4.918	34.102	26.973	113.2	0.884	515

CRUISE SQ87 LEG I STATION G 130

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 42.6 N	124 31.4 W	06/05/87	2023 GMT	3567 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
320	11 KT			1014.8 MB	13.3 C	12.8 C	

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	13.001	13.001	32.600	24.534	339.1	0.000	0
10	12.677	12.676	32.604	24.601	333.0	0.034	10
20	12.644	12.641	32.606	24.609	332.5	0.067	20
30	12.614	12.610	32.604	24.614	332.3	0.100	30
40	12.592	12.587	32.606	24.620	332.0	0.133	40
50	12.516	12.509	32.619	24.645	329.9	0.166	50
75	11.472	11.463	32.791	24.973	299.0	0.245	76
100	9.739	9.728	33.137	25.543	245.2	0.313	101
125	8.808	8.795	33.435	25.925	209.2	0.370	126
150	8.042	8.027	33.675	26.229	180.5	0.419	151
175	8.317	8.299	33.917	26.379	167.0	0.462	176
200	8.107	8.087	33.971	26.453	160.3	0.503	202
225	7.809	7.787	34.010	26.528	153.6	0.542	227
250	7.504	7.480	34.015	26.576	149.3	0.580	252
275	7.216	7.190	34.012	26.614	145.9	0.617	277
300	6.881	6.853	34.013	26.661	141.6	0.653	302
350	6.431	6.400	34.057	26.756	133.0	0.722	353
400	5.951	5.916	34.060	26.820	127.3	0.787	403
450	5.693	5.655	34.092	26.878	122.3	0.849	454
500	5.490	5.448	34.127	26.931	117.8	0.909	504
507	5.436	5.394	34.129	26.939	117.0	0.917	511

STATION G 132 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 52.2 N	124 37.3 W	06/05/87	2216 GMT	3532 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
320	12 KT			1013.3 MB	14.2 C	13.0 C	

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	13.192	13.192	32.650	24.535	339.0	0.000	0
10	12.916	12.915	32.657	24.595	333.5	0.034	10
20	12.775	12.772	32.649	24.617	331.7	0.067	20
30	12.751	12.747	32.650	24.623	331.5	0.100	30
40	12.693	12.688	32.648	24.633	330.7	0.133	40
50	12.559	12.552	32.656	24.665	327.9	0.166	50
75	11.248	11.239	32.732	24.968	299.5	0.245	76
100	10.141	10.130	33.038	25.399	259.0	0.314	101
125	9.249	9.235	33.449	25.867	214.9	0.374	126
150	8.544	8.528	33.696	26.171	186.3	0.424	151
175	8.237	8.219	33.824	26.318	172.7	0.469	176
200	7.889	7.869	33.891	26.422	163.1	0.511	202
225	7.497	7.475	33.929	26.509	155.2	0.550	227
250	7.355	7.331	33.976	26.566	150.1	0.589	252
275	7.081	7.055	33.997	26.621	145.1	0.625	277
300	6.879	6.851	34.030	26.675	140.3	0.661	302
350	6.297	6.266	34.052	26.770	131.7	0.729	353
400	5.875	5.841	34.063	26.832	126.1	0.794	403
450	5.520	5.482	34.097	26.903	119.8	0.855	454
500	5.344	5.303	34.119	26.942	116.5	0.914	504
509	5.343	5.301	34.129	26.950	115.8	0.925	513

CRUISE SQ87 LEG I STATION G 136

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
39 [illegible].0 N	124 49.9 W	07/05/87	0247 GMT	3082 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
330	12 KT			1014.6 MB	12.8 C	12.4 C	

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	13.306	13.306	32.735	24.579	334.9	0.000	0
10	13.276	13.275	32.737	24.586	334.4	0.033	10
20	13.053	13.050	32.740	24.633	330.2	0.067	20
30	12.974	12.970	32.742	24.651	328.9	0.100	30
40	12.341	12.336	32.786	24.807	314.1	0.132	40
50	11.614	11.608	32.769	24.930	302.6	0.163	50
75	10.987	10.978	32.935	25.172	280.1	0.235	76
100	9.388	9.377	33.403	25.808	219.9	0.298	101
125	8.818	8.805	33.738	26.161	186.8	0.349	126
150	8.546	8.530	33.834	26.279	176.1	0.394	151
175	8.316	8.298	33.903	26.368	168.0	0.437	176
200	8.127	8.107	33.942	26.427	162.8	0.479	202
225	8.006	7.983	33.961	26.460	160.0	0.519	227
250	7.775	7.750	33.981	26.510	155.6	0.558	252
275	7.579	7.552	34.001	26.555	151.8	0.597	277
300	7.395	7.366	34.014	26.591	148.6	0.634	302
350	6.716	6.684	34.017	26.687	139.8	0.706	353
400	6.146	6.111	34.042	26.782	131.1	0.774	403
450	5.748	5.710	34.088	26.868	123.3	0.838	454
500	5.379	5.338	34.108	26.929	117.8	0.898	504
520	5.158	5.116	34.117	26.962	114.6	0.921	525

STATION G 138 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
39 19.0 N	124 56.1 W	07/05/87	0432 GMT	M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
330	12 KT			1014.7 MB	12.2 C	12.0 C	

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	13.285	13.285	32.697	24.553	337.3	0.000	0
10	13.254	13.253	32.700	24.562	336.7	0.034	10
20	13.056	13.053	32.701	24.602	333.2	0.067	20
30	13.028	13.024	32.701	24.608	332.9	0.100	30
40	12.818	12.813	32.700	24.649	329.2	0.134	40
50	12.275	12.269	32.711	24.762	318.7	0.166	50
75	11.709	11.700	32.995	25.088	288.2	0.242	76
100	10.188	10.176	33.228	25.539	245.6	0.309	101
125	9.155	9.141	33.698	26.076	194.9	0.364	126
150	8.773	8.757	33.809	26.224	181.3	0.411	151
175	8.256	8.238	33.910	26.382	166.6	0.454	176
200	7.949	7.929	33.974	26.479	157.8	0.495	202
225	7.784	7.762	34.007	26.529	153.4	0.534	227
250	7.512	7.488	34.013	26.573	149.5	0.571	252
275	7.155	7.129	34.034	26.640	143.4	0.608	277
300	6.876	6.848	34.048	26.690	139.0	0.643	302
350	6.331	6.300	34.056	26.769	131.8	0.711	353
400	5.892	5.858	34.073	26.838	125.6	0.775	403
450	5.517	5.479	34.106	26.910	119.0	0.837	454
500	5.312	5.271	34.163	26.980	112.9	0.895	504
510	5.253	5.211	34.173	26.995	111.5	0.906	514

CRUISE SQ87 LEG I STATION G 142

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
39 37.7 N	125 7.9 W	07/05/87	0912 GMT	3052 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
330	08 KT			1013.4 MB	12.9 C	12.7 C	

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	12.163	12.163	32.365	24.513	341.1	0.000	0
10	12.169	12.168	32.371	24.517	341.0	0.034	10
20	12.464	12.461	32.547	24.598	333.6	0.068	20
30	12.632	12.628	32.771	24.740	320.3	0.101	30
40	11.837	11.832	32.752	24.875	307.6	0.132	40
50	11.744	11.738	32.856	24.973	298.5	0.162	50
75	10.581	10.572	32.970	25.270	270.7	0.233	76
100	8.671	8.661	33.315	25.852	215.6	0.294	101
125	8.585	8.572	33.686	26.156	187.2	0.345	126
150	8.199	8.184	33.884	26.370	167.3	0.389	151
175	7.928	7.911	33.947	26.460	159.1	0.430	176
200	7.572	7.553	33.986	26.543	151.6	0.468	202
225	7.124	7.103	34.001	26.618	144.7	0.506	227
250	6.812	6.789	33.997	26.657	141.2	0.541	252
275	6.655	6.630	34.013	26.691	138.2	0.576	277
300	6.446	6.419	34.029	26.732	134.7	0.610	302
350	6.127	6.096	34.066	26.802	128.5	0.676	353
400	5.586	5.553	34.082	26.883	121.1	0.738	403
450	5.469	5.432	34.143	26.945	115.7	0.798	454
500	5.239	5.198	34.183	27.005	110.5	0.854	504
511	5.163	5.121	34.200	27.027	108.4	0.866	515

STATION G 144 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
39 45.5 N	125 15.4 W	07/05/87	1054 GMT	3218 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
320	09 KT			1013.2 MB	12.9 C	12.8 C	

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	11.925	11.925	32.285	24.496	342.8	0.000	0
10	11.935	11.934	32.297	24.503	342.3	0.034	10
20	11.999	11.996	32.501	24.650	328.6	0.068	20
30	10.928	10.924	32.541	24.875	307.4	0.100	30
40	10.622	10.617	32.584	24.962	299.3	0.130	40
50	10.375	10.369	32.681	25.080	288.2	0.159	50
75	10.159	10.150	33.075	25.424	256.0	0.227	76
100	8.946	8.935	33.523	25.972	204.3	0.285	101
125	8.180	8.167	33.640	26.181	184.7	0.333	126
150	8.256	8.241	33.838	26.326	171.5	0.378	151
175	8.114	8.096	33.943	26.429	162.1	0.420	176
200	7.681	7.661	33.997	26.536	152.3	0.459	202
225	7.198	7.177	34.003	26.609	145.5	0.496	227
250	6.851	6.828	33.996	26.651	141.8	0.532	252
275	6.529	6.504	33.999	26.697	137.6	0.567	277
300	6.429	6.402	34.031	26.735	134.3	0.601	302
350	6.163	6.132	34.071	26.802	128.6	0.667	353
400	5.787	5.753	34.089	26.864	123.1	0.730	403
450	5.375	5.338	34.119	26.937	116.3	0.790	454
500	5.145	5.105	34.145	26.985	112.2	0.847	504
511	5.173	5.131	34.160	26.994	111.5	0.859	515

CRUISE SQ87 LEG I STATION G 148

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
39 27.5 N	125 17.2 W	07/05/87	1601 GMT	3330 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
340	06 KT	350 03 06	0	1012.8 MB	15.0 C	14.2 C	0/8

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	13.286	13.286	32.688	24.546	338.0	0.000	0
10	13.239	13.238	32.685	24.553	337.5	0.034	10
20	13.242	13.239	32.687	24.555	337.7	0.068	20
30	12.999	12.995	32.686	24.602	333.5	0.101	30
40	12.468	12.463	32.674	24.696	324.7	0.134	40
50	12.190	12.184	32.699	24.769	318.1	0.166	50
75	11.702	11.693	32.877	24.998	296.8	0.243	76
100	10.671	10.659	33.026	25.299	268.6	0.314	101
125	9.566	9.552	33.585	25.922	209.7	0.373	126
150	9.143	9.127	33.795	26.155	188.0	0.423	151
175	8.633	8.615	33.936	26.345	170.2	0.468	176
200	8.085	8.065	33.983	26.466	159.1	0.509	202
225	7.729	7.707	34.003	26.534	152.9	0.548	227
250	7.498	7.474	34.021	26.582	148.7	0.586	252
275	7.164	7.138	34.028	26.634	144.0	0.622	277
300	6.974	6.946	34.037	26.668	141.1	0.658	302
350	6.419	6.388	34.054	26.756	133.1	0.727	353
400	5.987	5.952	34.067	26.821	127.2	0.792	403
450	5.597	5.559	34.100	26.896	120.5	0.854	454
500	5.360	5.319	34.147	26.962	114.6	0.912	504
515	5.229	5.187	34.152	26.981	112.8	0.929	519

STATION G 150 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
39 18.6 N	125 10.1 W	07/05/87	1744 GMT	3052 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
				1013.9 MB	13.9 C	12.8 C	

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	13.567	13.567	32.677	24.481	344.1	0.000	0
10	13.137	13.136	32.667	24.560	336.9	0.034	10
20	13.114	13.111	32.665	24.563	336.9	0.068	20
30	12.944	12.940	32.650	24.585	335.1	0.101	30
40	12.625	12.620	32.699	24.685	325.7	0.134	40
50	12.231	12.225	32.768	24.814	313.7	0.166	50
75	11.585	11.576	32.889	25.029	293.8	0.242	76
100	9.946	9.935	33.196	25.555	244.1	0.310	101
125	9.580	9.566	33.589	25.923	209.6	0.366	126
150	9.098	9.082	33.831	26.190	184.7	0.416	151
175	8.811	8.792	33.911	26.298	174.8	0.460	176
200	8.258	8.238	33.960	26.422	163.4	0.503	202
225	7.886	7.864	33.998	26.507	155.6	0.543	227
250	7.467	7.443	33.999	26.569	150.0	0.581	252
275	7.156	7.130	34.016	26.626	144.8	0.618	277
300	6.940	6.912	34.028	26.665	141.3	0.653	302
350	6.349	6.318	34.049	26.761	132.6	0.722	353
400	5.893	5.859	34.060	26.828	126.6	0.787	403
450	5.450	5.413	34.088	26.904	119.6	0.848	454
500	5.316	5.275	34.139	26.961	114.7	0.907	504
515	5.296	5.254	34.158	26.978	113.2	0.924	519

CRUISE SQ87 LEG I STATION G 154

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
39 0.8 N	124 56.9 W	07/05/87	2221 GMT	3416 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
270	10 KT			1013.2 MB	15.1 C	14.1 C	

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	14.384	14.384	32.748	24.368	354.9	0.000	0
10	13.252	13.251	32.731	24.586	334.4	0.034	10
20	13.129	13.126	32.730	24.610	332.4	0.068	20
30	12.964	12.960	32.723	24.638	330.1	0.101	30
40	12.912	12.907	32.720	24.646	329.5	0.134	40
50	12.813	12.806	32.712	24.659	328.5	0.167	50
75	11.422	11.413	32.809	24.996	296.9	0.245	76
100	9.761	9.750	33.174	25.568	242.8	0.312	101
125	9.111	9.098	33.495	25.925	209.3	0.369	126
150	8.759	8.743	33.710	26.148	188.5	0.419	151
175	8.387	8.369	33.845	26.312	173.4	0.464	176
200	8.080	8.060	33.923	26.419	163.5	0.506	202
225	7.834	7.812	33.963	26.487	157.4	0.546	227
250	7.633	7.608	33.986	26.535	153.2	0.585	252
275	7.219	7.193	33.981	26.590	148.2	0.623	277
300	6.916	6.888	34.010	26.654	142.3	0.659	302
350	6.471	6.440	34.019	26.721	136.4	0.729	353
400	5.928	5.894	34.030	26.800	129.2	0.795	403
45^	5.574	5.536	34.047	26.857	124.1	0.858	454
500	5.413	5.372	34.096	26.915	119.1	0.919	504
510	5.429	5.387	34.120	26.932	117.6	0.931	514

STATION G 156 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 51.3 N	124 51.2 W	08/05/87	0003 GMT	3511 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
310	06 KT			1012.2 MB	15.4 C	14.3 C	

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	13.816	13.816	32.658	24.416	350.4	0.000	0
10	13.049	13.048	32.657	24.569	336.0	0.034	10
20	12.816	12.813	32.652	24.611	332.3	0.068	20
30	12.723	12.719	32.652	24.630	330.8	0.101	30
40	12.663	12.658	32.653	24.642	329.8	0.134	40
50	11.594	11.588	32.638	24.832	312.0	0.166	50
75	11.002	10.993	32.768	25.039	292.7	0.242	76
100	9.695	9.684	33.079	25.505	248.8	0.309	101
125	9.039	9.026	33.436	25.890	212.6	0.367	126
150	8.797	8.781	33.613	26.067	196.2	0.418	151
175	8.391	8.373	33.782	26.262	178.1	0.465	176
200	8.030	8.010	33.874	26.388	166.4	0.508	202
225	7.708	7.686	33.937	26.485	157.5	0.548	227
250	7.485	7.461	33.963	26.538	152.9	0.587	252
275	7.148	7.122	33.978	26.597	147.5	0.625	277
300	6.813	6.785	33.979	26.644	143.3	0.661	302
350	6.368	6.337	34.019	26.735	135.1	0.731	353
400	6.109	6.074	34.046	26.790	130.3	0.797	403
450	5.683	5.645	34.075	26.866	123.4	0.860	454
500	5.346	5.305	34.101	26.927	117.9	0.921	504
516	5.226	5.184	34.102	26.942	116.5	0.940	520

CRUISE SQ87 LEG I STATION G 160

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 34.2 N	124 37.6 W	08/05/87	0421 GMT	3703 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
				1014.0 MB	12.8 C	12.5 C	

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	13.607	13.607	32.618	24.428	349.2	0.000	0
10	12.918	12.917	32.588	24.542	338.6	0.034	10
20	12.652	12.649	32.562	24.573	335.9	0.068	20
30	12.617	12.613	32.577	24.592	334.4	0.102	30
40	11.944	11.939	32.615	24.749	319.6	0.134	40
50	11.703	11.697	32.659	24.828	312.4	0.166	50
75	11.378	11.369	32.763	24.968	299.5	0.242	76
100	9.966	9.955	33.095	25.472	251.9	0.311	101
125	8.947	8.934	33.478	25.937	208.1	0.369	126
150	8.772	8.756	33.797	26.215	182.2	0.418	151
175	8.267	8.249	33.904	26.376	167.2	0.461	176
200	8.055	8.035	33.979	26.467	159.0	0.502	202
225	7.809	7.787	34.009	26.527	153.6	0.541	227
250	7.491	7.467	34.007	26.572	149.7	0.579	252
275	7.243	7.217	34.030	26.625	144.9	0.616	277
300	6.936	6.908	34.027	26.665	141.3	0.652	302
350	6.464	6.433	34.048	26.745	134.2	0.721	353
400	6.074	6.039	34.092	26.830	126.5	0.786	403
450	5.843	5.804	34.124	26.885	121.8	0.848	454
500	5.629	5.587	34.169	26.947	116.3	0.907	504
511	5.597	5.554	34.173	26.954	115.8	0.920	515

STATION G 162 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 24.8 N	124 31.0 W	08/05/87	0609 GMT	3574 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
				1014.2 MB	12.2 C	12.2 C	

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	13.346	13.346	32.579	24.450	347.1	0.000	0
10	12.974	12.973	32.589	24.531	339.6	0.034	10
20	12.593	12.590	32.573	24.593	334.0	0.068	20
30	12.504	12.500	32.567	24.606	333.0	0.101	30
40	12.277	12.272	32.558	24.642	329.8	0.135	40
50	11.707	11.701	32.674	24.839	311.3	0.167	50
75	11.272	11.263	32.845	25.051	291.6	0.242	76
100	9.816	9.805	33.150	25.540	245.4	0.309	101
125	9.039	9.026	33.429	25.884	213.1	0.366	126
150	8.614	8.598	33.739	26.194	184.2	0.416	151
175	8.375	8.357	33.891	26.350	169.8	0.460	176
200	8.135	8.115	33.969	26.447	160.9	0.502	202
225	7.859	7.837	33.997	26.510	155.2	0.541	227
250	7.554	7.530	34.024	26.576	149.3	0.579	252
275	7.182	7.156	34.026	26.630	144.4	0.616	277
300	7.016	6.988	34.034	26.659	141.9	0.652	302
350	6.453	6.422	34.060	26.756	133.1	0.720	353
400	6.143	6.108	34.093	26.822	127.3	0.786	403
450	5.968	5.929	34.148	26.888	121.6	0.848	454
500	5.548	5.506	34.158	26.948	116.1	0.907	504
512	5.321	5.279	34.149	26.968	114.1	0.921	516

CRUISE SQ87 LEG I STATION G 166

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 [illegible]	[illegible]	08/05/87	1022 GMT	3733 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
310	03 KT			1013.8 MB	13.1 C	12.9 C	

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	12.810	12.810	32.490	24.487	343.6	0.000	0
10	12.622	12.621	32.495	24.527	340.0	0.034	10
20	12.396	12.393	32.495	24.571	336.1	0.068	20
30	12.459	12.455	32.540	24.594	334.2	0.102	30
40	12.616	12.611	32.771	24.743	320.3	0.134	40
50	12.297	12.291	32.787	24.816	313.5	0.166	50
75	11.188	11.179	32.849	25.069	289.9	0.241	76
100	9.172	9.161	33.136	25.634	236.4	0.307	101
125	9.411	9.397	33.559	25.927	209.2	0.363	126
150	9.053	9.037	33.755	26.138	189.6	0.413	151
175	8.774	8.755	33.879	26.279	176.6	0.458	176
200	8.399	8.378	33.944	26.388	166.6	0.501	202
225	8.062	8.039	33.984	26.470	159.1	0.542	227
250	7.772	7.747	34.021	26.542	152.6	0.581	252
275	7.491	7.464	34.022	26.584	149.0	0.619	277
300	7.060	7.032	34.015	26.639	143.9	0.655	302
350	6.529	6.497	34.042	26.732	135.5	0.725	353
400	6.175	6.140	34.094	26.819	127.6	0.791	403
450	5.661	5.623	34.095	26.884	121.6	0.853	454
500	5.484	5.442	34.158	26.956	115.4	0.913	504
515	5.383	5.340	34.157	26.967	114.4	0.930	519

STATION G 168 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
37 55.9 N	124 11.0 W	08/05/87	1228 GMT	3733 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
340	06 KT		4	1014.1 MB	12.8 C	13.0 C	8/8 ST

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	13.629	13.629	32.716	24.499	342.5	0.000	0
10	13.314	13.313	32.740	24.581	334.9	0.034	10
20	13.020	13.017	32.736	24.636	329.9	0.067	20
30	12.927	12.923	32.728	24.649	329.0	0.100	30
40	12.903	12.898	32.774	24.689	325.3	0.133	40
50	12.887	12.880	32.903	24.793	315.8	0.165	50
75	11.413	11.404	32.928	25.090	287.9	0.240	76
100	9.969	9.958	33.287	25.622	237.7	0.306	101
125	9.439	9.425	33.587	25.944	207.6	0.362	126
150	8.896	8.880	33.803	26.200	183.7	0.411	151
175	8.539	8.521	33.908	26.338	170.9	0.455	176
200	8.215	8.195	33.965	26.432	162.4	0.497	202
225	7.956	7.933	34.004	26.501	156.1	0.536	227
250	7.549	7.525	34.008	26.564	150.4	0.575	252
275	7.279	7.253	34.005	26.600	147.2	0.612	277
300	6.962	6.934	34.004	26.643	143.4	0.648	302
350	6.542	6.510	34.045	26.732	135.4	0.718	353
400	6.153	6.118	34.075	26.807	128.8	0.784	403
450	5.855	5.816	34.118	26.879	122.4	0.847	454
500	5.380	5.339	34.135	26.950	115.8	0.906	504
512	5.313	5.271	34.144	26.965	114.4	0.920	516

CRUISE SQ87 LEG I STATION G 171

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
37 35.7 N	124 13.5 W	08/05/87	1709 GMT	3733 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
310	02 KT	310 02 07	4	1016.8 MB	13.0 C	13.5 C	8/8 ST

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	13.195	13.195	32.556	24.462	346.0	0.000	0
10	12.880	12.879	32.557	24.525	340.2	0.034	10
20	12.572	12.569	32.553	24.582	335.1	0.068	20
30	12.484	12.480	32.553	24.599	333.7	0.102	30
40	12.350	12.345	32.560	24.630	331.0	0.135	40
50	11.497	11.491	32.610	24.827	312.4	0.167	50
75	11.059	11.050	32.857	25.099	287.1	0.242	76
100	9.731	9.720	33.300	25.671	233.0	0.307	101
125	8.863	8.850	33.616	26.058	196.6	0.361	126
150	8.984	8.968	33.843	26.218	182.0	0.408	151
175	8.638	8.620	33.928	26.338	170.9	0.452	176
200	8.313	8.292	33.987	26.435	162.1	0.494	202
225	8.054	8.031	34.026	26.504	155.9	0.533	227
250	7.820	7.795	34.055	26.562	150.8	0.572	252
275	7.726	7.699	34.100	26.611	146.5	0.609	277
300	7.583	7.554	34.113	26.642	143.9	0.645	302
350	6.993	6.960	34.124	26.734	135.6	0.715	353
400	6.058	6.023	34.059	26.806	128.8	0.781	403
450	5.702	5.664	34.101	26.884	121.7	0.844	454
500	5.371	5.330	34.145	26.959	114.9	0.903	504
510	5.227	5.185	34.150	26.980	112.9	0.914	514

STATION G 173 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
37 46.1 N	124 20.0 W	08/05/87	1844 GMT	3785 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
			4	1017.1 MB	13.8 C	13.8 C	8/8 ST

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	13.683	13.683	32.606	24.403	351.6	0.000	0
10	13.374	13.373	32.601	24.462	346.3	0.035	10
20	12.946	12.943	32.623	24.563	336.8	0.069	20
30	12.674	12.670	32.576	24.580	335.5	0.103	30
40	12.718	12.713	32.621	24.607	333.2	0.136	40
50	12.828	12.821	32.834	24.751	319.8	0.169	50
75	11.870	11.860	32.981	25.048	292.1	0.245	76
100	10.596	10.584	33.261	25.495	249.9	0.313	101
125	9.875	9.861	33.638	25.912	210.7	0.371	126
150	9.404	9.387	33.775	26.097	193.6	0.421	151
175	8.960	8.941	33.886	26.255	178.9	0.468	176
200	8.806	8.785	33.976	26.350	170.4	0.511	202
225	8.402	8.379	34.008	26.438	162.3	0.553	227
250	8.057	8.032	34.053	26.526	154.4	0.592	252
275	7.739	7.712	34.061	26.579	149.6	0.630	277
300	7.470	7.441	34.073	26.627	145.3	0.667	302
350	6.901	6.868	34.097	26.726	136.3	0.738	353
400	6.316	6.280	34.102	26.807	128.9	0.804	403
450	5.733	5.695	34.100	26.879	122.2	0.867	454
500	5.485	5.443	34.143	26.944	116.5	0.926	504
510	5.451	5.408	34.154	26.957	115.3	0.938	514

CRUISE SQ87 LEG I STATION G 177

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 5.0 N	124 33.2 W	08/05/87	2358 GMT	3909 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
			2	1016.0 MB	14.2 C	13.3 C	8/8 SC

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	13.686	13.686	32.541	24.352	356.5	0.000	0
10	13.165	13.164	32.615	24.514	341.3	0.035	10
20	13.100	13.097	32.667	24.567	336.5	0.069	20
30	13.026	13.022	32.762	24.656	328.4	0.102	30
40	12.990	12.985	32.767	24.667	327.5	0.135	40
50	12.812	12.805	32.858	24.772	317.7	0.167	50
75	11.604	11.595	32.958	25.079	289.0	0.243	76
100	10.589	10.577	33.353	25.568	243.0	0.309	101
125	10.448	10.433	33.632	25.810	220.5	0.367	126
150	9.999	9.982	33.753	25.982	204.7	0.421	151
175	9.550	9.530	33.851	26.133	190.7	0.470	176
200	9.058	9.036	33.945	26.286	176.5	0.516	202
225	8.671	8.647	34.006	26.395	166.5	0.559	227
250	8.361	8.335	34.037	26.468	160.1	0.600	252
275	8.102	8.074	34.057	26.522	155.2	0.639	277
300	7.846	7.816	34.074	26.574	150.6	0.677	302
350	7.298	7.264	34.105	26.677	141.3	0.750	353
400	6.759	6.722	34.125	26.767	133.1	0.819	403
450	6.354	6.314	34.140	26.833	127.2	0.884	454
500	5.920	5.877	34.166	26.909	120.3	0.946	504
512	5.819	5.775	34.170	26.925	118.9	0.960	516

STATION G 179 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 14.2 N	124 39.3 W	09/05/87	0122 GMT	3889 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
			2	1014.9 MB	13.3 C	12.9 C	8/8 ST

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	14.302	14.302	32.570	24.248	366.4	0.000	0
10	13.213	13.212	32.711	24.579	335.1	0.035	10
20	13.143	13.140	32.749	24.622	331.2	0.068	20
30	12.892	12.888	32.712	24.643	329.5	0.101	30
40	11.449	11.444	32.665	24.879	307.2	0.133	40
50	10.876	10.870	32.603	24.933	302.3	0.164	50
75	10.754	10.745	32.642	24.985	297.9	0.239	76
100	11.102	11.090	33.404	25.517	247.9	0.307	101
125	10.773	10.758	33.593	25.723	228.9	0.367	126
150	10.123	10.106	33.704	25.922	210.3	0.421	151
175	9.824	9.804	33.807	26.053	198.3	0.473	176
200	9.256	9.234	33.903	26.222	182.7	0.520	202
225	8.929	8.905	33.959	26.318	173.9	0.565	227
250	8.442	8.416	34.005	26.430	163.6	0.607	252
275	8.130	8.102	34.040	26.505	156.8	0.647	277
300	7.893	7.863	34.064	26.559	152.0	0.686	302
350	7.248	7.214	34.084	26.668	142.1	0.759	353
400	6.888	6.851	34.116	26.743	135.5	0.829	403
450	6.396	6.355	34.132	26.821	128.4	0.895	454
500	5.941	5.897	34.160	26.902	121.0	0.957	504
510	5.874	5.830	34.164	26.913	119.9	0.969	514

CRUISE SQ87 LEG I STATION G 183

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 32.9 N	124 52.8 W	09/05/87	0638 GMT	3789 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
350	06 KT		2	1016.9 MB	11.7 C	11.7 C	8/8 ST

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	14.057	14.057	32.750	24.438	348.3	0.000	0
10	13.303	13.302	32.709	24.559	337.0	0.034	10
20	12.941	12.938	32.679	24.608	332.6	0.068	20
30	12.950	12.946	32.707	24.628	331.0	0.101	30
40	13.400	13.394	33.014	24.777	317.1	0.133	40
50	12.146	12.140	32.793	24.850	310.3	0.165	50
75	11.441	11.432	33.013	25.151	282.1	0.239	76
100	10.609	10.597	33.316	25.535	246.1	0.305	101
125	10.170	10.156	33.610	25.841	217.6	0.363	126
150	9.653	9.636	33.805	26.080	195.3	0.414	151
175	9.224	9.205	33.897	26.222	182.2	0.462	176
200	8.785	8.764	33.991	26.365	169.0	0.505	202
225	8.426	8.403	34.042	26.461	160.2	0.547	227
250	8.001	7.976	34.025	26.512	155.6	0.586	252
275	7.758	7.731	34.057	26.573	150.2	0.624	277
300	7.604	7.574	34.100	26.629	145.2	0.661	302
350	6.915	6.882	34.096	26.723	136.6	0.732	353
400	6.370	6.334	34.085	26.787	130.9	0.798	403
450	6.125	6.085	34.129	26.854	125.1	0.862	454
500	5.465	5.423	34.107	26.918	118.9	0.922	504
509	5.428	5.386	34.113	26.927	118.1	0.934	513

STATION G 185 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 42.1 N	124 59.1 W	09/05/87	0814 GMT	3551 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
340	08 KT			1016.9 MB	12.9 C	13.1 C	

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	13.889	13.889	32.715	24.445	347.6	0.000	0
10	13.392	13.391	32.688	24.525	340.2	0.034	10
20	13.062	13.059	32.667	24.575	335.8	0.068	20
30	12.941	12.937	32.667	24.599	333.8	0.102	30
40	13.022	13.017	32.700	24.609	333.0	0.135	40
50	13.185	13.178	32.921	24.748	320.1	0.168	50
75	12.572	12.562	33.075	24.988	297.9	0.245	76
100	10.593	10.581	33.399	25.603	239.7	0.312	101
125	10.123	10.109	33.682	25.905	211.5	0.368	126
150	9.546	9.529	33.815	26.105	192.8	0.419	151
175	8.811	8.792	33.897	26.287	175.9	0.465	176
200	8.471	8.450	33.977	26.403	165.3	0.508	202
225	8.039	8.016	33.989	26.478	158.4	0.548	227
250	7.783	7.758	34.033	26.550	151.9	0.587	252
275	7.368	7.342	34.015	26.595	147.8	0.624	277
300	7.117	7.089	34.036	26.647	143.1	0.661	302
350	6.661	6.629	34.050	26.721	136.6	0.731	353
400	6.154	6.119	34.090	26.819	127.7	0.797	403
450	5.865	5.826	34.130	26.887	121.6	0.859	454
500	5.542	5.500	34.152	26.944	116.5	0.919	504
510	5.490	5.447	34.154	26.952	115.8	0.930	514

CRUISE SQ87 LEG I STATION G 189

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
39 0.0 N	125 13.1 W	09/05/87	1242 GMT	3227 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
300	05 KT			1016.2 MB	13.0 C	13.0 C	

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	13.583	13.583	32.636	24.446	347.5	0.000	0
10	13.032	13.031	32.682	24.592	333.9	0.034	10
20	13.083	13.080	32.736	24.624	331.1	0.067	20
30	13.082	13.078	32.759	24.642	329.6	0.100	30
40	12.764	12.759	32.741	24.691	325.2	0.133	40
50	12.310	12.304	32.787	24.814	313.7	0.165	50
75	11.337	11.328	32.806	25.009	295.6	0.241	76
100	10.506	10.494	32.963	25.278	270.5	0.312	101
125	9.221	9.207	33.362	25.803	220.9	0.373	126
150	9.113	9.097	33.642	26.040	198.9	0.426	151
175	8.421	8.403	33.812	26.281	176.3	0.473	176
200	7.982	7.962	33.888	26.406	164.7	0.515	202
225	7.775	7.753	33.946	26.482	157.8	0.556	227
250	7.409	7.385	33.965	26.550	151.7	0.594	252
275	7.090	7.064	33.986	26.611	146.1	0.632	277
300	6.687	6.660	33.978	26.660	141.6	0.668	302
350	6.321	6.290	34.006	26.730	135.4	0.737	353
400	5.944	5.909	34.054	26.816	127.7	0.803	403
450	5.624	5.586	34.095	26.889	121.2	0.865	454
500	5.183	5.142	34.096	26.942	116.3	0.924	504
511	5.128	5.087	34.114	26.963	114.4	0.937	515

STATION G 191 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
39 8.9 N	125 19.1 W	09/05/87	1424 GMT	3203 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
320	08 KT		2	1017.4 MB	11.7 C	11.5 C	8/8 ST

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	13.942	13.942	32.663	24.394	352.4	0.000	0
10	13.437	13.436	32.662	24.490	343.0	0.035	10
20	13.309	13.306	32.668	24.527	340.4	0.069	20
30	13.108	13.104	32.673	24.571	336.5	0.103	30
40	12.745	12.740	32.720	24.678	326.4	0.136	40
50	12.589	12.582	32.759	24.739	320.9	0.168	50
75	11.403	11.394	32.867	25.045	292.3	0.245	76
100	10.003	9.992	33.182	25.534	246.1	0.312	101
125	9.451	9.437	33.582	25.938	208.1	0.369	126
150	9.068	9.052	33.815	26.182	185.4	0.418	151
175	8.814	8.795	33.919	26.304	174.2	0.463	176
200	8.426	8.405	33.978	26.410	164.5	0.505	202
225	7.897	7.875	34.017	26.521	154.3	0.545	227
250	7.544	7.520	34.013	26.569	150.0	0.583	252
275	7.212	7.186	34.018	26.620	145.4	0.620	277
300	6.931	6.903	34.035	26.672	140.7	0.656	302
350	6.434	6.403	34.054	26.754	133.3	0.725	353
400	5.894	5.860	34.068	26.834	126.0	0.789	403
450	5.712	5.674	34.109	26.889	121.2	0.851	454
500	5.382	5.341	34.152	26.963	114.5	0.910	504
514	5.329	5.287	34.162	26.978	113.3	0.926	518

CRUISE SQ87 LEG I STATION G 195

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
39 26.8 N	125 32.2 W	09/05/87	1855 GMT	3633 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
330	10 KT		2	1018.2 MB	15.6 C	13.9 C	8/8 SC

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	14.052	14.052	32.633	24.348	356.8	0.000	0
10	13.448	13.447	32.662	24.494	343.2	0.035	10
20	13.393	13.390	32.688	24.525	340.5	0.069	20
30	13.249	13.246	32.732	24.588	334.8	0.103	30
40	12.750	12.746	32.733	24.687	325.5	0.136	40
50	12.709	12.702	32.749	24.708	323.9	0.168	50
75	11.847	11.837	32.922	25.006	296.0	0.246	76
100	10.238	10.226	33.176	25.490	250.3	0.314	101
125	9.603	9.589	33.586	25.917	210.2	0.372	126
150	9.315	9.299	33.775	26.111	192.2	0.422	151
175	8.934	8.915	33.914	26.281	176.4	0.468	176
200	8.514	8.491	33.984	26.402	165.3	0.511	202
225	8.125	8.102	34.005	26.478	158.5	0.551	227
250	7.787	7.762	34.035	26.551	151.8	0.590	252
275	7.526	7.499	34.057	26.606	146.9	0.627	277
300	7.203	7.174	34.058	26.653	142.7	0.664	302
350	6.640	6.608	34.069	26.739	134.9	0.733	353
400	6.344	6.308	34.115	26.814	128.3	0.799	403
450	5.987	5.948	34.157	26.893	121.2	0.861	454
500	5.776	5.733	34.209	26.961	115.2	0.920	504
513	5.706	5.662	34.212	26.972	114.3	0.935	517

STATION G 199 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
39 15.7 N	125 45.3 W	10/05/87	0039 GMT	3758 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
320	11 KT		2	1017.3 MB	13.0 C	12.7 C	8/8 SC

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	14.117	14.117	32.727	24.407	351.2	0.000	0
10	13.638	13.637	32.696	24.482	344.3	0.035	10
20	13.311	13.308	32.707	24.556	337.5	0.069	20
30	12.864	12.860	32.754	24.681	325.9	0.102	30
40	12.664	12.659	32.772	24.734	321.1	0.134	40
50	12.574	12.567	32.778	24.757	319.2	0.166	50
75	11.506	11.497	32.879	25.035	293.2	0.243	76
100	10.127	10.116	33.268	25.581	241.7	0.310	101
125	9.655	9.641	33.648	25.956	206.4	0.366	126
150	9.227	9.211	33.822	26.162	187.3	0.415	151
175	8.862	8.843	33.919	26.297	175.0	0.460	176
200	8.550	8.529	33.982	26.395	166.1	0.503	202
225	8.302	8.279	34.020	26.463	160.0	0.544	227
250	8.089	8.064	34.055	26.522	154.7	0.583	252
275	7.816	7.789	34.078	26.581	149.4	0.621	277
300	7.517	7.488	34.087	26.631	144.9	0.658	302
350	7.078	7.045	34.109	26.711	137.9	0.729	353
400	6.588	6.551	34.129	26.793	130.5	0.796	403
450	6.089	6.049	34.144	26.870	123.5	0.859	454
500	5.791	5.748	34.183	26.938	117.4	0.919	504
514	5.760	5.716	34.201	26.957	115.8	0.936	518

CRUISE SQ87 LEG I STATION G 201

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
39 6.6 N	125 38.3 W	10/05/87	0232 GMT	3603 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
330	12 KT		2	1018.5 MB	12.8 C	12.2 C	8/8 SC

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	13.962	13.962	32.676	24.400	351.9	0.000	0
10	13.830	13.829	32.676	24.427	349.5	0.035	10
20	13.242	13.239	32.673	24.544	338.7	0.069	20
30	13.040	13.036	32.672	24.583	335.3	0.103	30
40	12.625	12.620	32.690	24.678	326.4	0.136	40
50	12.462	12.455	32.731	24.742	320.6	0.169	50
75	11.690	11.681	32.853	24.981	298.3	0.246	76
100	10.313	10.301	33.049	25.378	260.9	0.316	101
125	9.577	9.563	33.528	25.875	214.1	0.375	126
150	9.039	9.023	33.776	26.156	187.8	0.425	151
175	8.657	8.639	33.927	26.335	171.3	0.470	176
200	8.308	8.287	33.997	26.443	161.4	0.512	202
225	8.065	8.042	34.034	26.509	155.5	0.552	227
250	7.711	7.686	34.029	26.557	151.2	0.590	252
275	7.553	7.526	34.065	26.609	146.6	0.627	277
300	7.250	7.221	34.081	26.664	141.6	0.663	302
350	6.602	6.570	34.060	26.736	135.1	0.732	353
400	6.346	6.310	34.121	26.819	127.9	0.798	403
450	5.709	5.671	34.102	26.884	121.7	0.860	454
500	5.473	5.431	34.138	26.941	116.7	0.920	504
509	5.408	5.366	34.134	26.946	116.3	0.931	513

STATION G 205 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 48.5 N	125 25.3 W	10/05/87	0742 GMT	3733 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
320	16 KT			1018.5 MB	13.6 C	13.2 C	

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	13.698	13.698	32.687	24.463	345.9	0.000	0
10	13.622	13.621	32.697	24.486	344.0	0.034	10
20	13.150	13.147	32.717	24.596	333.7	0.068	20
30	13.137	13.133	32.773	24.642	329.6	0.102	30
40	13.186	13.181	32.822	24.671	327.2	0.134	40
50	12.642	12.635	32.765	24.733	321.4	0.167	50
75	11.895	11.885	33.169	25.189	278.6	0.242	76
100	10.740	10.728	33.312	25.510	248.5	0.308	101
125	9.679	9.665	33.643	25.948	207.2	0.365	126
150	8.616	8.600	33.750	26.202	183.4	0.414	151
175	8.713	8.695	33.947	26.342	170.6	0.458	176
200	8.406	8.385	33.996	26.428	162.9	0.499	202
225	8.257	8.234	34.076	26.513	155.1	0.539	227
250	8.016	7.991	34.090	26.561	151.0	0.577	252
275	7.696	7.669	34.096	26.613	146.4	0.615	277
300	7.427	7.398	34.099	26.654	142.8	0.651	302
350	6.891	6.858	34.109	26.736	135.4	0.720	353
400	6.477	6.441	34.135	26.812	128.5	0.786	403
450	6.089	6.049	34.143	26.869	123.5	0.849	454
500	5.619	5.577	34.148	26.932	117.8	0.910	504
514	5.533	5.490	34.157	26.949	116.2	0.926	518

CRUISE SQ87 LEG I STATION G 207

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 40.1 N	125 18.2 W	10/05/87	0921 GMT	3552 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
330	21 KT			1018.5 MB	13.0 C	13.1 C	

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	13.808	13.808	32.775	24.508	341.6	0.000	0
10	13.836	13.835	32.783	24.509	341.8	0.034	10
20	13.730	13.727	32.897	24.619	331.6	0.068	20
30	13.521	13.517	32.887	24.654	328.6	0.101	30
40	13.247	13.242	32.841	24.673	326.9	0.134	40
50	13.326	13.319	32.896	24.700	324.6	0.166	50
75	12.572	12.562	33.022	24.947	301.8	0.244	76
100	11.131	11.119	33.308	25.437	255.5	0.314	101
125	10.082	10.068	33.661	25.895	212.3	0.373	126
150	9.723	9.706	33.773	26.043	198.8	0.424	151
175	9.194	9.175	33.912	26.239	180.6	0.471	176
200	8.741	8.720	33.981	26.365	169.0	0.515	202
225	8.320	8.297	34.009	26.451	161.1	0.556	227
250	8.121	8.096	34.048	26.512	155.7	0.596	252
275	7.864	7.836	34.070	26.568	150.7	0.634	277
300	7.436	7.407	34.081	26.638	144.2	0.671	302
350	7.059	7.026	34.137	26.736	135.6	0.741	353
400	6.385	6.349	34.126	26.817	128.0	0.807	403
450	6.036	5.997	34.141	26.874	123.0	0.870	454
500	5.795	5.752	34.172	26.929	118.2	0.930	504
514	5.693	5.649	34.183	26.951	116.3	0.946	518

STATION G 211 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 22.1 N	125 5.3 W	10/05/87	1401 GMT	3824 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
330	18 KT	330 04 06	2	1017.2 MB	13.0 C	13.1 C	8/8 ST

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	13.656	13.656	32.742	24.514	341.1	0.000	0
10	13.651	13.650	32.741	24.514	341.3	0.034	10
20	13.505	13.502	32.761	24.559	337.2	0.068	20
30	13.251	13.247	32.819	24.655	328.4	0.101	30
40	13.083	13.078	32.903	24.754	319.2	0.134	40
50	12.344	12.337	32.933	24.921	303.6	0.165	50
75	11.570	11.561	33.240	25.304	267.6	0.236	76
100	10.555	10.543	33.568	25.741	226.5	0.298	101
125	10.170	10.156	33.695	25.907	211.3	0.353	126
150	9.576	9.559	33.808	26.095	193.8	0.403	151
175	9.173	9.154	33.918	26.247	179.9	0.450	176
200	8.845	8.824	33.994	26.358	169.6	0.494	202
225	8.581	8.557	34.034	26.431	163.1	0.535	227
250	8.319	8.293	34.054	26.487	158.1	0.576	252
275	8.019	7.991	34.074	26.548	152.7	0.614	277
300	7.670	7.640	34.084	26.607	147.3	0.652	302
350	7.150	7.117	34.094	26.689	140.0	0.724	353
400	6.578	6.542	34.100	26.771	132.5	0.792	403
450	6.204	6.164	34.130	26.844	126.0	0.856	454
500	5.831	5.788	34.157	26.913	119.8	0.918	504
514	5.768	5.724	34.162	26.925	118.8	0.935	518

CRUISE SQ87 LEG I STATION G 213

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 12.9 N	124 57.8 W	10/05/87	1555 GMT	3898 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
330	24 KT	340 05 05	2	1017.7 MB	13.0 C	13.0 C	8/8 ST

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	13.646	13.646	32.731	24.507	341.7	0.000	0
10	13.647	13.646	32.732	24.508	341.9	0.034	10
20	13.524	13.521	32.721	24.525	340.6	0.068	20
30	12.922	12.918	32.670	24.605	333.2	0.102	30
40	12.745	12.740	32.811	24.749	319.7	0.135	40
50	12.994	12.987	32.974	24.827	312.6	0.166	50
75	11.492	11.483	33.298	25.364	261.9	0.238	76
100	10.895	10.883	33.585	25.695	231.0	0.300	101
125	10.557	10.542	33.662	25.815	220.1	0.356	126
150	10.222	10.205	33.737	25.931	209.5	0.410	151
175	9.897	9.877	33.824	26.055	198.3	0.461	176
200	9.483	9.461	33.904	26.186	186.2	0.509	202
225	8.972	8.948	33.947	26.302	175.5	0.554	227
250	8.542	8.516	34.015	26.423	164.4	0.597	252
275	8.290	8.262	34.071	26.505	156.9	0.637	277
300	7.850	7.820	34.071	26.571	150.9	0.675	302
350	7.195	7.162	34.093	26.682	140.7	0.748	353
400	6.776	6.739	34.115	26.757	134.0	0.817	403
450	6.332	6.292	34.134	26.831	127.4	0.882	454
500	5.963	5.919	34.152	26.893	121.9	0.944	504
511	5.871	5.827	34.158	26.909	120.4	0.958	515

STATION G 217 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
37 53.6 N	124 44.4 W	10/05/87	2126 GMT	4000 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
320	20 KT	320 08 06	2	1015.2 MB	13.9 C	12.8 C	8/8 SC

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	13.466	13.466	32.617	24.455	346.6	0.000	0
10	13.455	13.454	32.618	24.458	346.6	0.035	10
20	13.132	13.129	32.748	24.624	331.1	0.069	20
30	12.915	12.911	32.731	24.654	328.6	0.102	30
40	12.669	12.664	32.927	24.854	309.8	0.133	40
50	12.278	12.272	32.999	24.984	297.5	0.164	50
75	11.400	11.391	33.146	25.262	271.6	0.235	76
100	10.682	10.670	33.561	25.714	229.2	0.298	101
125	10.095	10.081	33.749	25.962	206.1	0.352	126
150	9.594	9.577	33.857	26.130	190.5	0.402	151
175	9.294	9.275	33.914	26.224	182.0	0.448	176
200	9.031	9.009	33.966	26.307	174.6	0.493	202
225	8.571	8.547	34.008	26.412	164.9	0.535	227
250	8.435	8.409	34.045	26.462	160.5	0.576	252
275	8.198	8.170	34.072	26.520	155.4	0.615	277
300	7.877	7.847	34.059	26.557	152.1	0.654	302
350	7.347	7.313	34.087	26.656	143.3	0.728	353
400	6.851	6.814	34.109	26.742	135.5	0.797	403
450	6.302	6.262	34.119	26.823	128.1	0.863	454
500	5.851	5.808	34.133	26.892	121.9	0.926	504
517	5.842	5.797	34.151	26.907	120.6	0.946	521

CRUISE SQ87 LEG I STATION G 219

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
37 43.9 N	124 38.3 W	10/05/87	2314 GMT	3795 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
340	24 KT		2	1014.8 MB	14.6 C	13.2 C	8/8 ST

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	13.239	13.239	32.600	24.488	343.5	0.000	0
10	13.229	13.228	32.604	24.493	343.3	0.034	10
20	13.228	13.225	32.605	24.494	343.5	0.069	20
30	13.060	13.056	32.742	24.634	330.5	0.102	30
40	12.904	12.899	32.781	24.695	324.8	0.135	40
50	12.813	12.806	32.986	24.872	308.3	0.167	50
75	11.753	11.744	33.140	25.193	278.2	0.240	76
100	10.554	10.542	33.433	25.636	236.5	0.304	101
125	10.100	10.086	33.687	25.913	210.7	0.360	126
150	9.567	9.550	33.840	26.121	191.3	0.411	151
175	9.249	9.230	33.923	26.238	180.7	0.457	176
200	8.902	8.881	33.980	26.339	171.5	0.501	202
225	8.541	8.517	34.021	26.427	163.5	0.543	227
250	8.157	8.131	34.047	26.506	156.2	0.583	252
275	7.773	7.746	34.076	26.586	149.0	0.621	277
300	7.559	7.530	34.087	26.625	145.5	0.658	302
350	7.005	6.972	34.092	26.707	138.2	0.729	353
400	6.534	6.498	34.122	26.795	130.3	0.796	403
450	6.121	6.081	34.146	26.868	123.7	0.859	454
500	5.727	5.684	34.167	26.934	117.8	0.920	504
510	5.690	5.646	34.173	26.943	116.9	0.932	514

STATION G 223 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
37 24.4 N	124 24.5 W	11/05/87	0358 GMT	4017 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
330	22 KT		2	1016.0 MB	12.2 C	12.0 C	8/8 ST

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	13.265	13.265	32.611	24.491	343.3	0.000	0
10	13.256	13.255	32.611	24.493	343.3	0.034	10
20	13.227	13.224	32.615	24.502	342.7	0.069	20
30	12.865	12.861	32.654	24.604	333.3	0.102	30
40	12.810	12.805	32.779	24.711	323.3	0.135	40
50	12.732	12.725	32.847	24.780	317.0	0.167	50
75	11.751	11.742	33.084	25.150	282.3	0.242	76
100	9.596	9.585	33.263	25.665	233.6	0.307	101
125	9.118	9.105	33.479	25.911	210.6	0.362	126
150	8.863	8.847	33.740	26.156	187.8	0.412	151
175	8.649	8.631	33.900	26.315	173.2	0.457	176
200	8.388	8.367	33.968	26.408	164.7	0.499	202
225	8.194	8.171	34.032	26.488	157.5	0.540	227
250	7.903	7.878	34.063	26.556	151.4	0.578	252
275	7.758	7.731	34.093	26.601	147.5	0.616	277
300	7.463	7.434	34.095	26.646	143.6	0.652	302
350	6.774	6.742	34.071	26.722	136.6	0.722	353
400	6.126	6.091	34.068	26.805	128.9	0.788	403
450	5.674	5.636	34.103	26.889	121.2	0.851	454
500	5.446	5.404	34.148	26.952	115.6	0.910	504
512	5.379	5.337	34.154	26.965	114.5	0.924	516

CRUISE SQ87 LEG I STATION G 226

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
37 22.0 N	124 45.2 W	11/05/87	0922 GMT	4159 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
330	25 KT			1015.2 MB	13.0 C	12.9 C	

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	13.195	13.195	32.562	24.467	345.5	0.000	0
10	13.204	13.203	32.562	24.465	345.9	0.035	10
20	13.187	13.184	32.560	24.468	346.0	0.069	20
30	13.109	13.105	32.558	24.481	344.9	0.104	30
40	12.047	12.042	32.552	24.681	326.1	0.137	40
50	11.746	11.740	32.602	24.776	317.3	0.169	50
75	11.194	11.185	32.911	25.116	285.4	0.245	76
100	10.301	10.289	33.339	25.606	239.3	0.310	101
125	10.057	10.043	33.689	25.921	209.9	0.366	126
150	9.459	9.442	33.858	26.153	188.3	0.416	151
175	9.088	9.069	33.931	26.270	177.6	0.462	176
200	8.738	8.717	33.987	26.370	168.5	0.505	202
225	8.371	8.348	34.016	26.449	161.3	0.546	227
250	8.014	7.989	34.050	26.530	153.9	0.586	252
275	7.678	7.651	34.065	26.591	148.4	0.624	277
300	7.396	7.367	34.078	26.641	143.9	0.660	302
350	6.901	6.868	34.104	26.731	135.8	0.730	353
400	6.469	6.433	34.129	26.809	128.9	0.796	403
450	6.031	5.992	34.158	26.888	121.7	0.859	454
500	5.681	5.638	34.181	26.950	116.1	0.918	504
513	5.500	5.457	34.182	26.973	113.9	0.933	517

STATION G 228 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
37 31.0 N	124 52.4 W	11/05/87	1137 GMT	4129 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
320	23 KT		1	1014.8 MB	12.7 C	11.8 C	6/8 SC

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	13.253	13 253	32.591	24.478	344.5	0.000	0
10	13.250	13.249	32.592	24.479	344.6	0.034	10
20	13.238	13.235	32.594	24.484	344.5	0.069	20
30	13.133	13.129	32.596	24.506	342.6	0.103	30
40	12.042	12.037	32.555	24.684	325.8	0.137	40
50	12.367	12.360	32.789	24.805	314.6	0.169	50
75	11.676	11.667	33.082	25.162	281.2	0.243	76
100	10.624	10.612	33.401	25.599	240.0	0.308	101
125	9.998	9.984	33.698	25.938	208.2	0.364	126
150	9.514	9.497	33.819	26.114	192.0	0.414	151
175	9.050	9.031	33.939	26.283	176.4	0.460	176
200	8.705	8.684	34.022	26.402	165.4	0.503	202
225	8.340	8.317	34.047	26.478	158.5	0.544	227
250	8.066	8.041	34.067	26.535	153.4	0.583	252
275	7.929	7.901	34.108	26.588	148.8	0.620	277
300	7.569	7.540	34.115	26.646	143.6	0.657	302
350	6.966	6.933	34.117	26.732	135.8	0.727	353
400	6.691	6.654	34.153	26.798	130.1	0.793	403
450	6.090	6.050	34.153	26.877	122.8	0.857	454
500	5.649	5.607	34.174	26.949	116.2	0.916	504
510	5.609	5.566	34.176	26.955	115.7	0.928	514

CRUISE SQ87 LEG I STATION G 232

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
37 50.8 N	125 4.0 W	11/05/87	1620 GMT	4089 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
330	22 KT		2	1016.5 MB	12.8 C	12.2 C	8/8 SC

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	13.225	13.225	32.627	24.511	341.3	0.000	0
10	13.220	13.219	32.627	24.512	341.4	0.034	10
20	13.204	13.201	32.628	24.517	341.3	0.068	20
30	12.191	12.187	32.558	24.658	328.0	0.102	30
40	11.610	11.606	32.567	24.773	317.2	0.134	40
50	11.359	11.353	32.567	24.819	313.2	0.166	50
75	11.443	11.434	32.932	25.088	288.1	0.241	76
100	10.890	10.878	33.361	25.521	247.5	0.308	101
125	10.242	10.227	33.637	25.849	216.7	0.366	126
150	9.573	9.556	33.795	26.085	194.8	0.417	151
175	9.079	9.060	33.928	26.269	177.7	0.464	176
200	8.734	8.710	33.991	26.374	168.1	0.507	202
225	8.334	8.311	34.035	26.469	159.3	0.548	227
250	8.084	8.059	34.076	26.540	153.0	0.587	252
275	7.858	7.830	34.081	26.577	149.8	0.625	277
300	7.631	7.601	34.098	26.624	145.7	0.662	302
350	7.152	7.119	34.130	26.717	137.4	0.732	353
400	6.841	6.804	34.152	26.778	132.2	0.800	403
450	6.163	6.123	34.137	26.855	124.9	0.864	454
500	5.777	5.734	34.150	26.914	119.6	0.925	504
507	5.697	5.654	34.161	26.933	117.9	0.934	511

STATION G 234 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 0.5 N	125 11.6 W	11/05/87	1808 GMT	4038 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
330	20 KT		1	1015.4 MB	13.3 C	12.8 C	5/8 CC

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	13.430	13.430	32.638	24.479	344.4	0.000	0
10	13.387	13.386	32.649	24.496	343.0	0.034	10
20	13.359	13.356	32.648	24.501	342.8	0.069	20
30	13.326	13.322	32.644	24.505	342.7	0.103	30
40	13 107	13.102	32.887	24.737	320.9	0.136	40
50	13.113	13.106	33.023	24.841	311.2	0.168	50
75	12.090	12.080	32.899	24.943	302.0	0.244	76
100	10.751	10.739	33.176	25.402	258.8	0.314	101
125	10.232	10.217	33.604	25.825	219.0	0.374	126
150	9.638	9.621	33.768	26.053	197.8	0.426	151
175	9.175	9.156	33.908	26.239	180.6	0.474	176
200	8.531	8.510	33.933	26.359	169.4	0.517	202
225	8.204	8.181	33.987	26.451	161.0	0.559	227
250	8.055	8.030	34.027	26.505	156.2	0.598	252
275	7.600	7.573	34.031	26.575	149.8	0.637	277
300	7.319	7.290	34.044	26.625	145.4	0.673	302
350	6.921	6.888	34.095	26.721	136.8	0.744	353
400	6.455	6.419	34.101	26.789	130.8	0.811	403
450	6.083	6.043	34.144	26.871	123.4	0.874	454
500	5.712	5.669	34.176	26.943	116.9	0.935	504
513	5.640	5.596	34.189	26.962	115.1	0.950	517

CRUISE SQ87 LEG I STATION G 238

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 19.2 N	125 25.7 W	11/05/87	2337 GMT	3754 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
320	21 KT		1	1015.2 MB	14.8 C	13.5 C	5/8 CC

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	14.085	14.085	32.816	24.483	344.0	0.000	0
10	14.043	14.042	32.814	24.490	343.6	0.034	10
20	13.965	13.962	32.816	24.508	342.1	0.069	20
30	13.996	13.992	32.891	24.560	337.5	0.103	30
40	13.080	13.075	32.800	24.675	326.8	0.136	40
50	12.474	12.467	32.779	24.777	317.3	0.168	50
75	11.447	11.438	32.886	25.052	291.6	0.244	76
100	10.406	10.394	33.377	25.618	238.2	0.310	101
125	9.523	9.509	33.642	25.973	204.8	0.366	126
150	8.985	8.969	33.794	26.179	185.7	0.415	151
175	8.346	8.328	33.878	26.344	170.3	0.459	176
200	7.969	7.949	33.929	26.440	161.5	0.501	202
225	7.812	7.790	33.964	26.491	157.0	0.540	227
250	7.534	7.510	33.989	26.551	151.6	0.579	252
275	7.202	7.176	33.992	26.601	147.2	0.616	277
300	6.941	6.913	33.991	26.636	144.1	0.653	302
350	6.247	6.216	34.022	26.752	133.3	0.722	353
400	6.182	6.147	34.105	26.827	126.9	0.787	403
450	5.969	5.930	34.153	26.892	121.2	0.849	454
500	5.717	5.674	34.180	26.945	116.6	0.909	504
510	5.671	5.628	34.189	26.958	115.5	0.920	514

STATION G 240 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 28.4 N	125 32.3 W	12/05/87	0131 GMT	3880 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
340	22 KT		1	1014.6 MB	15.0 C	14.4 C	6/8 CU

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	14.149	14.149	32.855	24.500	342.4	0.000	0
10	14.150	14.149	32.855	24.500	342.7	0.034	10
20	14.155	14.152	32.864	24.506	342.4	0.069	20
30	14.127	14.123	32.907	24.545	338.9	0.103	30
40	13.319	13.314	32.840	24.658	328.4	0.136	40
50	12.528	12.521	32.892	24.854	309.9	0.168	50
75	11.918	11.908	33.003	25.056	291.3	0.243	76
100	10.019	10.008	33.311	25.632	236.8	0.309	101
125	9.750	9.736	33.709	25.988	203.5	0.364	126
150	9.150	9.134	33.821	26.174	186.2	0.413	151
175	8.817	8.798	33.932	26.314	173.3	0.458	176
200	8.024	8.004	33.916	26.422	163.2	0.500	202
225	7.743	7.721	33.981	26.515	154.8	0.539	227
250	7.564	7.540	34.026	26.576	149.3	0.578	252
275	7.297	7.271	34.039	26.624	145.0	0.614	277
300	6.875	6.847	34.036	26.680	139.8	0.650	302
350	6.527	6.495	34.095	26.774	131.5	0.718	353
400	5.871	5.837	34.076	26.843	125.1	0.782	403
450	5.883	5.844	34.145	26.897	120.8	0.843	454
500	5.615	5.573	34.176	26.955	115.6	0.902	504
515	5.505	5.462	34.178	26.969	114.3	0.920	519

CRUISE SQ87 LEG I STATION G 244

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 46.0 N	125 45.3 W	12/05/87	0556 GMT	4028 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
330	12 KT		2	1017.6 MB	13.9 C	13.9 C	8/8 ST

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	13.863	13.863	32.768	24.491	343.2	0.000	0
10	13.862	13.861	32.771	24.494	343.2	0.034	10
20	13.858	13.855	32.780	24.502	342.7	0.069	20
30	13.855	13.851	32.920	24.611	332.6	0.102	30
40	13.987	13.981	33.020	24.662	328.1	0.135	40
50	13.758	13.751	33.029	24.716	323.2	0.168	50
75	12.038	12.028	33.172	25.165	281.0	0.244	76
100	10.580	10.568	33.316	25.541	245.6	0.309	101
125	9.893	9.879	33.653	25.921	209.9	0.366	126
150	9.289	9.273	33.762	26.105	192.7	0.417	151
175	8.330	8.312	33.803	26.287	175.6	0.463	176
200	8.178	8.158	33.922	26.404	165.0	0.505	202
225	7.900	7.878	33.952	26.469	159.2	0.546	227
250	7.943	7.918	34.054	26.543	152.6	0.585	252
275	7.809	7.782	34.077	26.581	149.4	0.622	277
300	7.595	7.566	34.086	26.619	146.1	0.659	302
350	7.015	6.982	34.080	26.697	139.2	0.731	353
400	6.546	6.510	34.099	26.775	132.1	0.799	403
450	6.048	6.009	34.136	26.869	123.5	0.862	454
500	5.552	5.510	34.173	26.960	115.1	0.922	504
508	5.486	5.443	34.178	26.972	114.0	0.931	512

STATION G 246 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 54.8 N	125 51.5 W	12/05/87	0800 GMT	3986 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
310	15 KT		4	1017.5 MB	14.5 C	15.0 C	

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	13.607	13.607	32.697	24.489	343.4	0.000	0
10	13.603	13.602	32.698	24.490	343.5	0.034	10
20	13.546	13.543	32.698	24.502	342.7	0.069	20
30	12.909	12.905	32.710	24.638	330.0	0.102	30
40	12.719	12.714	32.741	24.700	324.4	0.135	40
50	12.389	12.382	32.785	24.797	315.3	0.167	50
75	11.194	11.185	32.895	25.104	286.6	0.242	76
100	9.886	9.875	33.192	25.562	243.4	0.308	101
125	8.992	8.979	33.516	25.960	205.9	0.365	126
150	8.606	8.590	33.702	26.166	186.8	0.414	151
175	8.196	8.178	33.830	26.329	171.7	0.459	176
200	8.243	8.223	33.948	26.415	164.0	0.501	202
225	7.839	7.817	33.966	26.489	157.2	0.541	227
250	7.807	7.782	34.032	26.546	152.3	0.579	252
275	7.625	7.598	34.068	26.601	147.5	0.617	277
300	7.436	7.407	34.080	26.637	144.3	0.653	302
350	6.913	6.880	34.085	26.714	137.4	0.724	353
400	6.235	6.200	34.083	26.803	129.2	0.790	403
450	5.957	5.918	34.134	26.879	122.5	0.853	454
500	5.520	5.478	34.137	26.935	117.4	0.913	504
509	5.489	5.446	34.140	26.941	116.8	0.924	513

CRUISE SQ87 LEG I STATION G 250

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
39 13.7 N	126 4.4 W	12/05/87	1244 GMT	3986 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
320	13 KT		2	1016.9 MB	13.9 C	13.2 C	8/8 ST

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	13.905	13.905	32.762	24.478	344.4	0.000	0
10	13.904	13.903	32.762	24.479	344.7	0.034	10
20	13.859	13.856	32.765	24.490	343.8	0.069	20
30	13.666	13.662	32.763	24.529	340.5	0.103	30
40	12.981	12.976	32.749	24.655	328.6	0.137	40
50	12.487	12.480	32.747	24.749	319.9	0.169	50
75	11.500	11.491	32.835	25.002	296.3	0.246	76
100	10.365	10.353	33.242	25.520	247.5	0.314	101
125	9.947	9.933	33.678	25.931	208.9	0.371	126
150	9.631	9.614	33.826	26.100	193.4	0.421	151
175	9.316	9.297	33.907	26.215	182.9	0.468	176
200	9.029	9.007	33.948	26.293	175.8	0.513	202
225	8.692	8.668	33.998	26.386	167.4	0.556	227
250	8.476	8.450	34.015	26.433	163.4	0.597	252
275	8.194	8.166	34.045	26.499	157.4	0.638	277
300	8.036	8.006	34.074	26.546	153.3	0.676	302
350	7.317	7.283	34.074	26.650	143.9	0.751	353
400	7.058	7.020	34.158	26.753	134.7	0.820	403
450	6.620	6.579	34.165	26.818	128.9	0.886	454
500	6.096	6.052	34.170	26.890	122.3	0.949	504
510	5.866	5.822	34.146	26.900	121.2	0.961	514

STATION G 252 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
39 24.1 N	125 59.0 W	12/05/87	1500 GMT	3904 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
320	14 KT		2	1017.6 MB	13.3 C	13.3 C	8/8 ST

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	13.904	13.904	32.759	24.476	344.6	0.000	0
10	13.875	13.874	32.760	24.483	344.2	0.034	10
20	13.680	13.677	32.762	24.525	340.6	0.069	20
30	13.400	13.396	32.762	24.582	335.5	0.102	30
40	12.758	12.753	32.756	24.704	324.0	0.135	40
50	12.588	12.581	32.763	24.742	320.6	0.168	50
75	11.050	11.041	32.931	25.158	281.5	0.243	76
100	10.052	10.041	33.598	25.851	216.0	0.305	101
125	9.930	9.916	33.783	26.016	200.9	0.357	126
150	9.663	9.646	33.870	26.129	190.6	0.406	151
175	9.376	9.357	33.929	26.222	182.2	0.453	176
200	9.109	9.087	33.966	26.295	175.8	0.498	202
225	8.768	8.744	33.999	26.375	168.5	0.541	227
250	8.455	8.429	34.042	26.457	161.1	0.582	252
275	8.167	8.139	34.075	26.527	154.7	0.621	277
300	7.818	7.788	34.100	26.598	148.3	0.659	302
350	7.431	7.397	34.124	26.673	141.7	0.732	353
400	6.859	6.822	34.159	26.781	131.9	0.800	403
450	6.507	6.466	34.175	26.841	126.7	0.865	454
500	6.147	6.103	34.188	26.898	121.6	0.927	504
509	6.082	6.037	34.191	26.909	120.7	0.938	513

CRUISE SQ87 LEG I STATION G 254

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
39 39.1 N	125 41.4 W	12/05/87	1756 GMT	3673 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
330	12 KT		2	1018.6 MB	12.8 C	12.8 C	8/8 ST

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	13.881	13.881	32.718	24.449	347.2	0.000	0
10	13.816	13.815	32.721	24.465	346.0	0.035	10
20	13.595	13.592	32.745	24.529	340.1	0.069	20
30	12.436	12.432	32.623	24.662	327.7	0.102	30
40	12.781	12.776	32.791	24.726	321.8	0.135	40
50	12.691	12.684	32.896	24.825	312.7	0.167	50
75	11.585	11.576	32.937	25.066	290.3	0.242	76
100	10.406	10.394	33.149	25.440	255.1	0.310	101
125	9.615	9.601	33.576	25.906	211.2	0.368	126
150	9.089	9.073	33.723	26.107	192.5	0.419	151
175	8.666	8.648	33.882	26.298	174.8	0.465	176
200	8.282	8.261	33.940	26.402	165.2	0.507	202
225	7.804	7.782	33.975	26.501	156.1	0.547	227
250	7.435	7.411	33.992	26.568	150.0	0.586	252
275	7.130	7.104	34.007	26.622	145.1	0.623	277
300	6.752	6.724	34.011	26.677	140.0	0.658	302
350	6.188	6.157	34.025	26.762	132.3	0.726	353
400	5.866	5.832	34.076	26.844	125.0	0.791	403
450	5.614	5.576	34.111	26.903	119.9	0.852	454
500	5.340	5.299	34.149	26.966	114.3	0.910	504
509	5.343	5.301	34.161	26.975	113.5	0.921	513

STATION G 256 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
39 53.3 N	125 22.2 W	12/05/87	2056 GMT	2888 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
330	08 KT		1	1016.8 MB	13.3 C	13.3 C	6/8 ST

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	13.152	13.152	32.627	24.526	339.9	0.000	0
10	12.273	12.272	32.583	24.662	327.2	0.033	10
20	11.061	11.059	32.738	25.004	294.8	0.064	20
30	10.815	10.811	32.833	25.122	283.8	0.093	30
40	10.622	10.617	32.989	25.277	269.3	0.121	40
50	10.671	10.665	33.219	25.448	253.3	0.147	50
75	9.197	9.189	33.490	25.906	210.1	0.205	76
100	8.449	8.439	33.708	26.194	183.2	0.254	101
125	8.162	8.149	33.841	26.342	169.5	0.298	126
150	7.927	7.912	33.900	26.423	162.2	0.340	151
175	7.681	7.664	33.952	26.500	155.2	0.379	176
200	7.311	7.292	33.990	26.583	147.7	0.417	202
225	7.028	7.007	34.005	26.634	143.1	0.454	227
250	6.729	6.706	34.011	26.680	139.0	0.489	252
275	6.528	6.503	34.014	26.709	136.5	0.523	277
300	6.426	6.399	34.042	26.745	133.5	0.557	302
350	5.942	5.912	34.073	26.831	125.6	0.622	353
400	5.649	5.615	34.108	26.896	119.9	0.683	403
450	5.410	5.373	34.135	26.946	115.6	0.742	454
500	5.103	5.063	34.144	26.990	111.7	0.799	504
543	4.938	4.895	34.173	27.032	108.1	0.846	548

CRUISE SQ87 LEG I STATION G 258

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
40 8.9 N	125 4.8 W	12/05/87	2345 GMT	1231 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
320	14 KT		1	1015.8 MB	13.1 C	12.8 C	6/8 CS

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	11.817	11.817	33.006	25.075	287.6	0.000	0
10	11.428	11.427	33.005	25.146	281.1	0.028	10
20	11.192	11.190	33.004	25.188	277.4	0.056	20
30	11.132	11.128	33.014	25.207	275.8	0.084	30
40	10.992	10.987	33.037	25.250	271.9	0.111	40
50	10.309	10.303	33.197	25.493	248.9	0.137	50
75	8.735	8.727	33.668	26.118	189.9	0.192	76
100	8.102	8.092	33.824	26.337	169.5	0.237	101
125	7.629	7.617	33.950	26.505	153.9	0.278	126
150	7.250	7.236	33.986	26.587	146.4	0.315	151
175	6.996	6.980	34.000	26.634	142.3	0.351	176
200	6.826	6.808	34.029	26.680	138.2	0.386	202
225	6.475	6.455	34.037	26.733	133.4	0.420	227
250	6.216	6.194	34.047	26.775	129.7	0.453	252
275	6.141	6.117	34.057	26.793	128.3	0.485	277
300	6.006	5.980	34.090	26.836	124.5	0.517	302
350	5.826	5.796	34.117	26.880	120.9	0.578	353
400	5.301	5.268	34.113	26.941	115.3	0.637	403
450	5.052	5.016	34.162	27.009	109.2	0.694	454
500	4.839	4.800	34.181	27.049	105.8	0.747	504
509	4.810	4.770	34.186	27.056	105.2	0.757	513

STATION G 260 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
40 24.5 N	124 45.5 W	13/05/87	0259 GMT	1928 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
350	12 KT		2	1016.6 MB	12.2 C	12.2 C	8/8 ST

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	11.821	11.821	32.787	24.905	303.8	0.000	0
10	11.228	11.227	32.871	25.078	287.6	0.030	10
20	10.886	10.884	32.909	25.168	279.2	0.058	20
30	9.780	9.777	33.154	25.548	243.3	0.084	30
40	9.363	9.359	33.265	25.703	228.7	0.108	40
50	9.044	9.039	33.382	25.845	215.3	0.130	50
75	8.496	8.488	33.725	26.199	182.2	0.180	76
100	8.189	8.179	33.852	26.346	168.7	0.223	101
125	7.963	7.951	33.922	26.435	160.6	0.265	126
150	7.889	7.874	33.942	26.462	158.5	0.304	151
175	7.741	7.724	33.970	26.505	154.8	0.344	176
200	7.626	7.606	33.986	26.535	152.3	0.382	202
225	7.438	7.416	34.006	26.578	148.6	0.420	227
250	7.339	7.315	34.020	26.603	146.6	0.457	252
275	6.983	6.957	34.025	26.657	141.8	0.493	277
300	6.790	6.762	34.048	26.701	137.8	0.528	302
350	6.543	6.511	34.058	26.742	134.5	0.596	353
400	6.145	6.110	34.094	26.823	127.3	0.661	403
450	5.843	5.804	34.129	26.889	121.5	0.723	454
500	5.459	5.417	34.164	26.964	114.6	0.782	504
510	5.388	5.346	34.172	26.979	113.2	0.794	514

CRUISE SQ87 LEG I

STATION N 12 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 50.7 N	124 26.9 W	15/05/87	1000 GMT	3460 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
330	27 KT			1015.2 MB	13.7 C	13.7 C	

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	13.483	13.483	32.532	24.386	353.2	0.000	0
10	13.488	13.487	32.532	24.385	353.6	0.035	10
20	13.472	13.469	32.549	24.402	352.3	0.071	20
30	12.521	12.517	32.658	24.673	326.6	0.105	30
40	11.709	11.704	32.751	24.898	305.4	0.136	40
50	11.630	11.624	32.856	24.994	296.5	0.166	50
75	10.007	9.998	33.211	25.556	243.5	0.234	76
100	9.314	9.303	33.573	25.953	206.2	0.290	101
125	9.047	9.034	33.794	26.169	186.2	0.339	126
150	8.211	8.196	33.839	26.333	170.8	0.384	151
175	8.075	8.057	33.904	26.405	164.4	0.426	176
200	7.850	7.830	33.946	26.471	158.5	0.466	202
225	7.675	7.653	33.949	26.499	156.2	0.505	227
250	7.433	7.409	33.980	26.558	150.9	0.544	252
275	7.072	7.046	33.975	26.605	146.7	0.581	277
300	6.714	6.687	33.964	26.645	143.1	0.617	302

CRUISE SQ87 LEG II STATION N 13

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 43.8 N	124 23.6 W	15/05/87	1151 GMT	3416 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
340	35 KT		2	1015.3 MB	12.9 C	12.5 C	8/8 ST

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	12.620	12.620	32.677	24.668	326.3	0.000	0
10	12.624	12.623	32.679	24.669	326.5	0.033	10
20	12.514	12.511	32.709	24.714	322.5	0.065	20
30	11.275	11.271	32.919	25.107	285.3	0.095	30
40	10.640	10.635	32.979	25.266	270.3	0.123	40
50	10.193	10.187	33.080	25.422	255.7	0.150	50
75	9.379	9.371	33.553	25.926	208.2	0.208	76
100	8.658	8.648	33.681	26.141	188.2	0.257	101
125	8.604	8.591	33.840	26.274	176.1	0.303	126
150	8.284	8.269	33.926	26.390	165.4	0.345	151
175	8.060	8.042	33.986	26.471	158.1	0.386	176
200	7.730	7.710	34.003	26.533	152.6	0.425	202
225	7.462	7.440	34.016	26.582	148.2	0.462	227
250	7.190	7.166	34.024	26.627	144.3	0.499	252
275	6.720	6.695	33.994	26.668	140.5	0.534	277
300	6.702	6.675	34.027	26.696	138.2	0.569	302

STATION N 14 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 38.9 N	124 20.9 W	15/05/87	1308 GMT	3401 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
330	28 KT	330 07 06	1	1014.6 MB	13.1 C	13.0 C	7/8 SC

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	12.833	12.833	32.735	24.672	326.0	0.000	0
10	12.821	12.820	32.748	24.685	325.0	0.033	10
20	12.682	12.679	32.820	24.768	317.4	0.065	20
30	10.301	10.298	33.338	25.604	238.0	0.092	30
40	9.573	9.569	33.264	25.668	232.0	0.116	40
50	9.556	9.550	33.411	25.786	221.0	0.139	50
75	8.776	8.768	33.620	26.074	194.1	0.190	76
100	8.453	8.443	33.780	26.250	177.8	0.237	101
125	8.060	8.047	33.909	26.410	163.0	0.280	126
150	7.809	7.794	33.946	26.476	157.1	0.320	151
175	7.668	7.651	33.967	26.514	154.0	0.358	176
200	7.333	7.314	33.984	26.575	148.5	0.396	202
225	6.988	6.967	34.008	26.642	142.4	0.433	227
250	6.741	6.718	34.008	26.676	139.4	0.468	252
275	6.599	6.574	34.035	26.716	135.9	0.502	277
300	6.400	6.373	34.050	26.754	132.5	0.536	302
306	6.407	6.380	34.053	26.756	132.4	0.544	308

CRUISE SQ87 LEG II STATION N 15

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 33.8 N	124 16.9 W	15/05/87	1429 GMT	3401 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
330	32 KT	330 08 06		1014.2 MB	13.2 C	12.9 C	

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	12.353	12.353	33.047	25.006	294.2	0.000	0
10	12.355	12.354	33.047	25.006	294.4	0.029	10
20	10.677	10.675	33.308	25.516	246.1	0.056	20
30	9.616	9.613	33.346	25.725	226.4	0.080	30
40	9.694	9.690	33.465	25.805	219.0	0.102	40
50	9.315	9.310	33.587	25.963	204.3	0.124	50
75	8.724	8.716	33.750	26.184	183.6	0.172	76
100	8.186	8.176	33.874	26.364	167.0	0.216	101
125	7.881	7.869	33.911	26.438	160.3	0.257	126
150	7.473	7.459	33.956	26.532	151.6	0.296	151
175	7.275	7.258	33.999	26.594	146.1	0.333	176
200	6.987	6.968	34.011	26.644	141.8	0.369	202
225	6.763	6.742	34.021	26.683	138.4	0.404	227
250	6.478	6.456	34.016	26.717	135.4	0.438	252
275	6.290	6.266	34.032	26.754	132.1	0.472	277
300	6.185	6.159	34.040	26.774	130.5	0.504	302
309	6.180	6.153	34.044	26.778	130.3	0.516	312

STATION N 16 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 27.3 N	124 12.9 W	15/05/87	1549 GMT	3430 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
330	28 KT		1	1014.2 MB	13.3 C	12.8 C	5/8 SC

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	12.477	12.477	33.266	25.152	280.2	0.000	0
10	12.467	12.466	33.273	25.160	279.8	0.028	10
20	12.400	12.397	33.281	25.179	278.2	0.056	20
30	10.216	10.213	33.476	25.726	226.3	0.081	30
40	9.504	9.500	33.559	25.910	209.1	0.103	40
50	9.031	9.026	33.626	26.038	197.0	0.123	50
75	8.527	8.519	33.747	26.212	180.9	0.170	76
100	8.241	8.231	33.848	26.335	169.7	0.214	101
125	7.979	7.967	33.926	26.435	160.6	0.256	126
150	7.716	7.701	33.989	26.524	152.6	0.295	151
175	7.310	7.293	34.016	26.603	145.4	0.332	176
200	6.812	6.794	34.014	26.670	139.2	0.368	202
225	6.611	6.591	34.010	26.694	137.2	0.402	227
250	6.459	6.437	34.020	26.722	134.8	0.436	252
275	6.353	6.329	34.037	26.750	132.5	0.470	277
300	6.164	6.138	34.046	26.781	129.8	0.502	302

CRUISE SQ87 LEG II STATION N 28

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
37 46.0 N	123 24.3 W	17/05/87	1830 GMT	1507 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
340	14 KT		2	1011.1 MB	10.0 C	9.6 C	8/8 ST

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	10.897	10.897	33.534	25.653	232.7	0.000	0
10	10.820	10.819	33.547	25.677	230.6	0.023	10
20	10.800	10.798	33.549	25.682	230.4	0.046	20
30	10.783	10.779	33.557	25.691	229.7	0.069	30
40	10.784	10.779	33.561	25.695	229.6	0.092	40
50	10.453	10.447	33.603	25.785	221.2	0.115	50
75	9.543	9.535	33.763	26.064	195.2	0.167	76
100	9.277	9.266	33.914	26.225	180.4	0.214	101
125	8.962	8.949	33.995	26.340	169.9	0.258	126
150	8.814	8.798	34.025	26.387	165.9	0.299	151
175	8.482	8.464	34.045	26.454	159.9	0.340	176
200	8.253	8.232	34.072	26.510	155.0	0.380	202
225	8.144	8.121	34.110	26.557	151.0	0.418	227
250	8.009	7.984	34.134	26.596	147.6	0.455	252
275	7.814	7.787	34.156	26.643	143.6	0.492	277
300	7.696	7.666	34.163	26.666	141.8	0.527	302
309	7.654	7.623	34.172	26.679	140.7	0.540	311

STATION N 30 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
37 52.9 N	123 28.6 W	17/05/87	2012 GMT	1172 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
340	07 KT		1	1013.0 MB	13.9 C	13.3 C	7/8 SC

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	10.831	10.831	33.491	25.631	234.7	0.000	0
10	10.619	10.618	33.492	25.669	231.3	0.023	10
20	10.604	10.602	33.493	25.673	231.2	0.046	20
30	10.562	10.558	33.509	25.693	229.6	0.069	30
40	10.513	10.508	33.535	25.722	227.0	0.092	40
50	10.414	10.408	33.542	25.744	225.1	0.115	50
75	9.449	9.441	33.854	26.150	187.0	0.166	76
100	9.027	9.016	33.959	26.301	173.2	0.211	101
125	8.555	8.542	34.026	26.427	161.5	0.253	126
150	8.506	8.490	34.045	26.450	159.8	0.293	151
175	8.323	8.305	34.060	26.490	156.5	0.333	176
200	8.180	8.160	34.068	26.518	154.2	0.372	202
225	8.068	8.045	34.097	26.558	150.8	0.410	227
250	7.759	7.734	34.122	26.623	144.9	0.447	252
275	7.254	7.228	34.110	26.686	139.1	0.482	277
300	7.068	7.040	34.105	26.708	137.3	0.517	302
307	7.067	7.038	34.106	26.709	137.4	0.527	309

CRUISE SQ87 LEG II STATION N 32

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
37 59.8 N	123 33.1 W	17/05/87	2142 GMT	1231 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
340	08 KT		1	1012.7 MB	11.7 C	10.6 C	6/8 SC

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	9.955	9.955	33.420	25.726	225.7	0.000	0
10	9.937	9.936	33.437	25.742	224.3	0.023	10
20	9.791	9.789	33.457	25.783	220.7	0.045	20
30	9.836	9.833	33.475	25.790	220.3	0.067	30
40	9.882	9.877	33.488	25.792	220.3	0.089	40
50	9.956	9.950	33.511	25.798	220.0	0.111	50
75	9.333	9.325	33.751	26.088	192.8	0.162	76
100	8.992	8.981	33.936	26.288	174.3	0.208	101
125	8.766	8.753	33.996	26.371	166.9	0.251	126
150	8.511	8.495	34.044	26.448	160.0	0.292	151
175	8.431	8.413	34.082	26.491	156.4	0.331	176
200	8.038	8.018	34.088	26.555	150.7	0.370	202
225	7.867	7.845	34.090	26.582	148.5	0.407	227
250	7.735	7.710	34.093	26.604	146.7	0.444	252
275	7.377	7.350	34.107	26.667	141.1	0.480	277
300	7.185	7.156	34.109	26.695	138.7	0.515	302
307	7.178	7.149	34.111	26.698	138.5	0.525	309

STATION N 34 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 7.0 N	123 38.2 W	17/05/87	2321 GMT	1885 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
340	08 KT		1	1012.7 MB	11.7 C	10.6 C	6/8 SC

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	11.164	11.164	32.947	25.148	280.6	0.000	0
10	11.143	11.142	32.950	25.155	280.3	0.028	10
20	11.053	11.051	32.967	25.184	277.7	0.056	20
30	10.393	10.390	33.094	25.398	257.5	0.083	30
40	10.155	10.150	33.157	25.488	249.2	0.108	40
50	9.925	9.919	33.214	25.571	241.5	0.133	50
75	9.144	9.136	33.592	25.994	201.7	0.188	76
100	8.796	8.785	33.840	26.244	178.5	0.235	101
125	8.604	8.591	33.910	26.329	170.9	0.279	126
150	8.594	8.578	33.989	26.393	165.3	0.321	151
175	8.288	8.270	34.045	26.484	157.0	0.361	176
200	8.339	8.318	34.090	26.511	154.9	0.400	202
225	8.074	8.051	34.111	26.568	149.8	0.439	227
250	7.709	7.684	34.097	26.611	146.1	0.476	252
275	7.533	7.506	34.091	26.632	144.4	0.512	277
300	7.290	7.261	34.093	26.668	141.3	0.548	302
305	7.274	7.245	34.092	26.670	141.2	0.555	307

CRUISE SQ87 LEG II STATION N 43

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 19.8 N	123 29.6 W	19/05/87	0211 GMT	230 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
010	08 KT		1	1012.0 MB	11.7 C	10.8 C	6/8 AC

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	11.447	11.447	33.065	25.189	276.8	0.000	0
10	10.812	10.811	33.131	25.354	261.3	0.027	10
20	10.146	10.144	33.225	25.542	243.6	0.052	20
30	9.799	9.796	33.244	25.615	236.9	0.076	30
40	9.483	9.479	33.390	25.781	221.3	0.099	40
50	9.356	9.351	33.445	25.845	215.4	0.121	50
75	8.765	8.757	33.635	26.087	192.8	0.172	76
100	8.741	8.730	33.863	26.270	176.0	0.218	101
125	8.407	8.394	33.905	26.355	168.3	0.261	126
150	8.324	8.309	33.938	26.394	165.1	0.303	151
175	8.174	8.156	33.998	26.464	158.9	0.343	176
198	8.061	8.041	34.030	26.506	155.3	0.379	200

STATION N 44 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 17.7 N	123 35.2 W	19/05/87	0430 GMT	526 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
			1	1013.0 MB	11.7 C	10.6 C	4/8 AC

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	12.418	12.418	32.724	24.743	319.2	0.000	0
10	11.760	11.759	32.805	24.930	301.7	0.031	10
20	11.478	11.476	32.865	25.028	292.5	0.061	20
30	10.931	10.927	32.980	25.216	274.9	0.089	30
40	10.346	10.341	33.138	25.441	253.7	0.116	40
50	10.078	10.072	33.182	25.521	246.3	0.141	50
75	9.256	9.248	33.611	25.991	202.0	0.197	76
100	9.191	9.180	33.887	26.218	181.0	0.244	101
125	8.948	8.935	33.959	26.313	172.4	0.289	126
150	8.720	8.704	34.003	26.384	166.2	0.331	151
175	8.477	8.459	34.074	26.478	157.7	0.371	176
200	8.120	8.100	34.065	26.525	153.6	0.410	202
225	8.102	8.079	34.119	26.570	149.7	0.448	227
250	7.734	7.709	34.105	26.614	145.9	0.485	252
275	7.374	7.347	34.101	26.662	141.5	0.521	277
297	7.201	7.173	34.095	26.682	139.8	0.552	299
300 E	7.177	7.148	34.095	26.685	139.6	0.556	302

CRUISE SQ87 LEG II STATION N 45

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 16.1 N	123 38.9 W	19/05/87	0549 GMT	1067 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
			2	1013.2 MB	10.6 C	10.0 C	8/8 SC

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	12.710	12.710	32.738	24.698	323.5	0.000	0
10	12.233	12.232	32.753	24.801	313.9	0.032	10
20	11.958	11.955	32.764	24.862	308.4	0.063	20
30	11.940	11.936	32.770	24.870	307.9	0.094	30
40	10.987	10.982	32.969	25.198	276.9	0.123	40
50	10.462	10.456	33.102	25.393	258.5	0.150	50
75	9.338	9.330	33.581	25.955	205.5	0.208	76
100	9.321	9.310	33.911	26.216	181.3	0.256	101
125	8.835	8.822	33.988	26.354	168.5	0.300	126
150	8.668	8.652	34.000	26.390	165.6	0.342	151
175	8.444	8.426	34.035	26.452	160.1	0.382	176
200	8.348	8.327	34.058	26.485	157.4	0.422	202
225	8.009	7.986	34.067	26.543	152.2	0.461	227
250	8.053	8.028	34.123	26.581	149.1	0.498	252
275	7.885	7.857	34.129	26.611	146.6	0.535	277
300	7.505	7.476	34.101	26.644	143.7	0.572	302
307	7.470	7.440	34.100	26.648	143.4	0.582	309

STATION N 46 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 13.9 N	123 43.1 W	19/05/87	0715 GMT	1854 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
			2	1012.0 MB	11.1 C	10.0 C	8/8 SC

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	12.497	12.497	32.748	24.747	318.9	0.000	0
10	12.131	12.130	32.748	24.817	312.5	0.032	10
20	11.936	11.933	32.790	24.886	306.1	0.062	20
30	11.917	11.913	32.812	24.907	304.4	0.093	30
40	10.912	10.907	33.044	25.269	270.0	0.122	40
50	10.071	10.065	33.211	25.544	244.0	0.147	50
75	9.269	9.261	33.656	26.024	198.9	0.203	76
100	9.105	9.094	33.891	26.235	179.4	0.250	101
125	8.896	8.883	33.951	26.315	172.2	0.294	126
150	8.563	8.547	34.017	26.419	162.7	0.336	151
175	8.381	8.363	34.044	26.469	158.5	0.376	176
200	8.233	8.213	34.074	26.515	154.5	0.415	202
225	8.154	8.131	34.078	26.530	153.5	0.454	227
250	8.038	8.013	34.087	26.555	151.6	0.492	252
275	7.860	7.832	34.101	26.593	148.4	0.529	277
300	7.311	7.282	34.095	26.667	141.4	0.566	302
308	7.295	7.265	34.091	26.666	141.6	0.577	311

CRUISE SQ87 LEG II STATION N 47

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 10.9 N	123 41.0 W	19/05/87	0951 GMT	1879 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
100	04 KT			1011.1 MB	12.0 C	11.1 C	

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	12.073	12.073	32.821	24.884	305.8	0.000	0
10	11.611	11.610	32.864	25.003	294.7	0.030	10
20	11.412	11.410	32.899	25.067	288.9	0.059	20
30	10.945	10.941	33.002	25.231	273.5	0.087	30
40	9.977	9.972	33.204	25.555	242.8	0.113	40
50	9.499	9.493	33.373	25.766	223.0	0.136	50
75	9.064	9.056	33.654	26.055	195.9	0.189	76
100	8.930	8.919	33.865	26.242	178.6	0.236	101
125	8.962	8.949	33.936	26.293	174.3	0.280	126
150	8.709	8.693	33.975	26.364	168.0	0.323	151
175	8.528	8.510	34.011	26.420	163.1	0.364	176
200	8.428	8.407	34.088	26.496	156.4	0.404	202
225	8.276	8.253	34.109	26.536	153.0	0.443	227
250	8.085	8.060	34.133	26.584	148.8	0.480	252
275	7.880	7.852	34.152	26.630	144.9	0.517	277
300	7.457	7.428	34.129	26.673	141.0	0.553	302
307	7.435	7.405	34.130	26.677	140.7	0.563	309

STATION N 48 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 6.9 N	123 38.2 W	19/05/87	1048 GMT	1860 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
			2	1011.0 MB	10.6 C	10.0 C	8/8 SC

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	10.962	10.962	33.063	25.274	268.6	0.000	0
10	10.611	10.610	33.097	25.363	260.5	0.026	10
20	10.255	10.253	33.204	25.507	246.9	0.052	20
30	10.194	10.191	33.244	25.549	243.2	0.076	30
40	9.858	9.854	33.283	25.636	235.1	0.100	40
50	9.334	9.329	33.413	25.823	217.5	0.123	50
75	9.329	9.321	33.690	26.041	197.3	0.175	76
100	9.189	9.178	33.933	26.254	177.6	0.222	101
125	8.903	8.890	33.994	26.348	169.1	0.265	126
150	8.620	8.604	34.042	26.430	161.7	0.306	151
175	8.474	8.456	34.057	26.465	158.9	0.346	176
200	8.181	8.161	34.087	26.533	152.8	0.385	202
225	7.973	7.950	34.088	26.565	150.1	0.423	227
250	7.928	7.803	34.094	26.590	148.2	0.460	252
275	7.718	7.691	34.096	26.609	146.7	0.497	277
300	7.631	7.601	34.100	26.625	145.6	0.534	302
304	7.625	7.595	34.100	26.626	145.5	0.540	306

CRUISE SQ87 LEG II STATION N 49

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 3.6 N	123 36.2 W	19/05/87	1309 GMT	1482 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
			2	1011.3 MB	10.7 C	10.1 C	8/8 ST

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	10.279	10.279	33.238	25.530	244.4	0.000	0
10	9.983	9.982	33.271	25.605	237.4	0.024	10
20	9.850	9.848	33.337	25.679	230.6	0.047	20
30	9.591	9.588	33.467	25.824	217.1	0.070	30
40	9.598	9.594	33.562	25.897	210.3	0.091	40
50	9.531	9.525	33.587	25.927	207.6	0.112	50
75	9.469	9.461	33.847	26.141	187.8	0.162	76
100	9.161	9.150	33.941	26.265	176.6	0.207	101
125	8.774	8.761	34.006	26.378	166.3	0.250	126
150	8.562	8.546	34.028	26.428	161.9	0.291	151
175	8.408	8.390	34.044	26.465	158.9	0.331	176
200	8.263	8.242	34.068	26.506	155.4	0.370	202
225	7.949	7.926	34.088	26.569	149.8	0.409	227
250	7.745	7.720	34.094	26.604	146.8	0.446	252
275	7.579	7.552	34.097	26.630	144.6	0.482	277
300	7.432	7.403	34.107	26.659	142.2	0.518	302
306	7.407	7.377	34.109	26.664	141.8	0.526	308

STATION N 50 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 0.0 N	123 33.2 W	19/05/87	1426 GMT	1210 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
320	04 KT	320 10 07	2	1012.3 MB	11.5 C	11.2 C	8/8 ST

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	10.679	10.679	33.557	25.709	227.3	0.000	0
10	10.064	10.063	33.551	25.810	217.9	0.022	10
20	10.003	10.001	33.579	25.843	215.1	0.044	20
30	10.017	10.014	33.680	25.919	208.0	0.065	30
40	9.825	9.820	33.732	25.992	201.2	0.086	40
50	9.790	9.784	33.815	26.063	194.8	0.105	50
75	9.356	9.348	33.901	26.202	182.0	0.152	76
100	9.116	9.105	33.953	26.282	175.0	0.197	101
125	8.960	8.947	33.997	26.341	169.8	0.240	126
150	8.657	8.641	34.050	26.431	161.7	0.282	151
175	8.600	8.582	34.067	26.453	160.0	0.322	176
200	8.365	8.344	34.082	26.501	155.9	0.361	202
225	8.013	7.990	34.084	26.556	151.0	0.400	227
250	7.865	7.840	34.092	26.584	148.7	0.437	252
275	7.461	7.434	34.086	26.638	143.8	0.474	277
300	7.134	7.106	34.102	26.697	138.5	0.509	302
306	7.124	7.095	34.110	26.705	137.8	0.517	308

CRUISE SQ87 LEG II STATION N 51

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
37 57.3 N	123 31.5 W	19/05/87	1715 GMT	1284 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
320	04 KT	320 12 07	2	1012.6 MB	12.7 C	11.9 C	8/8 ST

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	10.884	10.884	33.553	25.670	231.1	0.000	0
10	10.774	10.773	33.552	25.688	229.5	0.023	10
20	10.795	10.793	33.583	25.709	227.8	0.046	20
30	10.555	10.551	33.649	25.803	219.1	0.068	30
40	10.172	10.167	33.779	25.970	203.3	0.089	40
50	10.032	10.026	33.811	26.019	198.9	0.109	50
75	9.758	9.750	33.857	26.102	191.6	0.158	76
100	9.618	9.607	33.878	26.142	188.4	0.206	101
125	9.080	9.066	33.959	26.293	174.4	0.251	126
150	8.745	8.729	34.014	26.389	165.7	0.294	151
175	8.657	8.639	34.058	26.437	161.6	0.335	176
200	8.550	8.529	34.087	26.477	158.3	0.375	202
225	8.443	8.420	34.116	26.517	154.9	0.414	227
250	8.402	8.376	34.124	26.530	154.2	0.452	252
275	8.013	7.985	34.107	26.575	150.1	0.490	277
300	7.644	7.614	34.109	26.631	145.1	0.527	302
307	7.591	7.561	34.120	26.647	143.6	0.537	309

STATION N 54 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 6.1 N	123 48.3 W	19/05/87	2102 GMT	2998 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
010	09 KT		1	1012.3 MB	11.7 C	10.6 C	6/8 ST

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	11.023	11.023	33.494	25.599	237.8	0.000	0
10	10.922	10.921	33.501	25.623	235.7	0.024	10
20	10.846	10.844	33.509	25.643	234.1	0.047	20
30	10.818	10.814	33.516	25.653	233.3	0.071	30
40	10.811	10.806	33.516	25.655	233.4	0.094	40
50	10.729	10.723	33.516	25.669	232.2	0.117	50
75	9.922	9.913	33.719	25.967	204.5	0.172	76
100	9.295	9.284	33.901	26.212	181.6	0.220	101
125	9.150	9.136	33.957	26.280	175.6	0.265	126
150	8.858	8.842	34.019	26.375	167.0	0.307	151
175	8.624	8.606	34.042	26.430	162.3	0.349	176
200	8.111	8.091	34.050	26.514	154.5	0.388	202
225	8.090	8.067	34.109	26.564	150.3	0.426	227
250	7.841	7.816	34.140	26.626	144.8	0.463	252
275	7.702	7.675	34.154	26.657	142.1	0.499	277
300	7.573	7.544	34.187	26.702	138.3	0.534	302
307	7.557	7.527	34.193	26.709	137.7	0.544	309

CRUISE SQ87 LEG II STATION N 56

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 10.6 N	123 58.9 W	19/05/87	2257 GMT	3567 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
320	14 KT		1	1012.9 MB	12.1 C	10.6 C	6/8 CU

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	11.242	11.242	33.341	25.441	252.8	0.000	0
10	11.104	11.103	33.372	25.490	248.4	0.025	10
20	10.398	10.396	33.334	25.584	239.6	0.049	20
30	10.005	10.002	33.432	25.728	226.2	0.073	30
40	10.069	10.064	33.485	25.759	223.5	0.095	40
50	10.167	10.161	33.528	25.776	222.1	0.118	50
75	9.886	9.877	33.775	26.016	199.7	0.170	76
100	9.366	9.355	33.913	26.210	181.8	0.218	101
125	9.046	9.033	33.969	26.306	173.2	0.262	126
150	8.544	8.528	33.996	26.406	164.0	0.304	151
175	8.158	8.140	33.993	26.462	159.0	0.345	176
200	7.745	7.725	34.022	26.546	151.4	0.384	202
225	7.330	7.308	34.027	26.610	145.5	0.421	227
250	7.159	7.135	34.044	26.647	142.4	0.457	252
275	6.889	6.864	34.036	26.678	139.7	0.492	277
300	6.923	6.895	34.111	26.733	134.9	0.526	302
307	6.920	6.891	34.115	26.737	134.7	0.536	309

STATION N 58 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
38 2.6 N	123 59.6 W	20/05/87	0026 GMT	3557 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
330	20 KT		1	1012.5 MB	12.7 C	10.6 C	5/8 AS

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	11.467	11.467	33.434	25.472	249.8	0.000	0
10	11.144	11.143	33.478	25.565	241.2	0.025	10
20	11.023	11.021	33.504	25.607	237.4	0.048	20
30	10.922	10.918	33.512	25.632	235.4	0.072	30
40	10.850	10.845	33.512	25.645	234.4	0.096	40
50	10.691	10.685	33.612	25.751	224.5	0.119	50
75	9.723	9.715	33.833	26.089	192.8	0.171	76
100	9.366	9.355	33.868	26.175	185.1	0.218	101
125	8.696	8.683	33.930	26.330	170.8	0.262	126
150	8.254	8.239	33.982	26.439	160.8	0.304	151
175	8.221	8.203	34.017	26.472	158.2	0.344	176
200	7.761	7.741	34.005	26.531	152.9	0.383	202
225	7.479	7.457	34.027	26.589	147.6	0.420	227
250	7.185	[illegible]	34.018	26.623	144.6	0.457	252
275	7.016	6.990	34.054	26.675	140.0	0.492	277
300	6.789	6.761	34.069	26.718	136.2	0.527	302

CRUISE SQ87 LEG II STATION N 60

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
37 54.5 N	123 59.8 W	20/05/87	0151 GMT	3607 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
340	20 KT		1	1014.0 MB	11.7 C	10.6 C	1/8 CU

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	12.295	12.295	33.264	25.186	277.1	0.000	0
10	11.868	11.867	33.369	25.348	261.9	0.027	10
20	11.678	11.675	33.448	25.445	252.9	0.053	20
30	10.813	10.809	33.412	25.573	241.0	0.077	30
40	9.868	9.863	33.447	25.762	223.1	0.101	40
50	9.600	9.594	33.525	25.868	213.3	0.122	50
75	8.982	8.974	33.680	26.089	192.7	0.173	76
100	8.873	8.862	33.834	26.227	180.1	0.220	101
125	8.773	8.760	33.965	26.346	169.3	0.263	126
150	8.407	8.392	34.003	26.432	161.5	0.305	151
175	8.040	8.022	34.018	26.500	155.5	0.344	176
200	7.862	7.842	34.039	26.542	151.8	0.383	202
225	7.517	7.495	34.049	26.600	146.5	0.420	227
250	7.333	7.308	34.062	26.637	143.4	0.456	252
275	7.085	7.059	34.060	26.670	140.5	0.492	277
300	6.871	6.843	34.074	26.711	137.0	0.526	302
307	6.808	6.780	34.078	26.722	135.9	0.536	309

STATION N 62 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
37 44.7 N	124 4.2 W	20/05/87	0421 GMT	3542 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
330	25 KT		1	1014.2 MB	10.3 C	9.6 C	1/8 CU

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	12.371	12.371	33.261	25.169	278.7	0.000	0
10	12.383	12.382	33.261	25.167	279.1	0.028	10
20	12.333	12.330	33.232	25.154	280.6	0.056	20
30	9.935	9.932	33.310	25.644	234.1	0.082	30
40	9.669	9.665	33.371	25.736	225.6	0.105	40
50	9.473	9.468	33.434	25.817	218.0	0.127	50
75	9.169	9.161	33.674	26.054	196.0	0.179	76
100	8.627	8.617	33.846	26.275	175.5	0.225	101
125	8.615	8.602	33.982	26.384	165.7	0.268	126
150	8.346	8.331	34.021	26.456	159.3	0.308	151
175	7.952	7.934	34.044	26.533	152.3	0.347	176
200	7.634	7.614	34.061	26.593	146.9	0.385	202
225	7.317	7.295	34.063	26.640	142.7	0.421	227
250	7.113	7.089	34.070	26.674	139.8	0.456	252
275	6.774	6.749	34.064	26.716	136.0	0.491	277
300	6.670	6.643	34.090	26.750	133.1	0.524	302
311	6.598	6.570	34.104	26.771	131.2	0.539	313

CRUISE SQ87 LEG II STATION N 66

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
37 45.7 N	124 16.9 W	20/05/87	0737 GMT	3683 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
340	27 KT			1013.1 MB	11.9 C	11.0 C	

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	11.172	11.172	32.972	25.166	278.9	0.000	0
10	11.177	11.176	32.971	25.165	279.3	0.028	10
20	11.053	11.051	33.015	25.221	274.1	0.056	20
30	10.775	10.771	33.072	25.315	265.5	0.083	30
40	10.091	10.086	33.182	25.518	246.3	0.108	40
50	9.618	9.612	33.336	25.717	227.6	0.132	50
75	9.287	9.279	33.636	26.006	200.6	0.185	76
100	8.732	8.721	33.771	26.200	182.7	0.233	101
125	8.479	8.469	33.832	26.287	174.8	0.278	126
150	8.108	8.093	33.905	26.400	164.4	0.320	151
175	7.881	7.864	33.993	26.503	155.0	0.360	176
200	7.629	7.609	34.025	26.565	149.5	0.398	202
225	7.520	7.498	34.069	26.616	145.1	0.435	227
250	7.585	7.561	34.123	26.649	142.4	0.471	252
275	7.499	7.472	34.158	26.689	139.0	0.506	277
300	7.04[illegible]	7.019	34.131	26.732	135.1	0.541	302
308	6.918	6.889	34.122	26.742	134.1	0.551	310

STATION N 68 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
37 37.0 N	124 20.4 W	20/05/87	1032 GMT	3758 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
340	24 KT		2	1012.4 MB	11.9 C	10.5 C	8/8 SC

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	11.134	11.134	32.984	25.182	277.4	0.000	0
10	11.137	11.136	32.984	25.182	277.7	0.028	10
20	11.118	11.116	32.989	25.190	277.2	0.055	20
30	10.999	10.995	33.027	25.240	272.6	0.083	30
40	10.776	10.771	33.109	25.344	262.9	0.110	40
50	9.941	9.935	33.233	25.583	240.3	0.135	50
75	9.515	9.507	33.449	25.823	218.0	0.192	76
100	9.130	9.119	33.710	26.089	193.2	0.244	101
125	8.760	8.747	33.865	26.269	176.5	0.290	126
150	8.327	8.312	33.918	26.378	166.7	0.333	151
175	7.980	7.962	33.977	26.476	157.6	0.373	176
200	7.866	7.846	34.034	26.538	152.2	0.412	202
225	8 027	8.004	34.123	26.585	148.3	0.450	227
250	7.628	7.603	34.114	26.636	143.7	0.486	252
275	7.162	7.136	34.087	26.681	139.6	0.521	277
300	6.956	6.928	34.092	26.713	136.8	0.556	302
305	6.930	6.902	34.094	26.719	136.3	0.563	307

CRUISE SQ87 LEG II STATION N 70

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
37 26.8 N	124 23.3 W	20/05/87	1157 GMT	3987 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
340	27 KT			1012.3 MB	12.3 C	11.3 C	

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	12.037	12.037	33.302	25.264	269.6	0.000	0
10	12.039	12.038	33.301	25.263	270.0	0.027	10
20	12.008	12.005	33.322	25.285	268.1	0.054	20
30	12.000	11.996	33.330	25.293	267.6	0.081	30
40	11.876	11.871	33.342	25.326	264.7	0.107	40
50	11.418	11.412	33.352	25.418	256.2	0.133	50
75	9.716	9.708	33.479	25.813	219.0	0.193	76
100	9.214	9.203	33.672	26.046	197.3	0.245	101
125	8.653	8.640	33.818	26.249	178.4	0.292	126
150	8.626	8.610	34.007	26.402	164.5	0.335	151
175	8.166	8.148	34.037	26.496	155.9	0.375	176
200	7.860	7.840	34.047	26.549	151.1	0.413	202
225	7.715	7.693	34.065	26.585	148.2	0.450	227
250	7.555	7.531	34.110	26.644	142.9	0.487	252
275	7.287	7.261	34.110	26.682	139.6	0.522	277
300	7.001	6.973	34.106	26.718	136.4	0.557	302
304	6.996	6.967	34.110	26.722	136.0	0.562	306

STATION N 72 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
37 16.9 N	124 26.8 W	20/05/87	1423 GMT	4063 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
330	22 KT		2	1014.2 MB	11.7 C	10.6 C	8/8 SC

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	11.833	11.833	33.207	25.228	273.0	0.000	0
10	11.842	11.841	33.206	25.226	273.5	0.027	10
20	11.807	11.804	33.207	25.234	273.0	0.055	20
30	11.325	11.321	33.198	25.315	265.5	0.082	30
40	10.554	10.549	33.203	25.456	252.3	0.107	40
50	9.731	9.725	33.300	25.670	232.0	0.132	50
75	8.927	8.919	33.565	26.008	200.4	0.186	76
100	9.016	9.005	33.883	26.243	178.6	0.233	101
125	8.813	8.800	33.955	26.332	170.6	0.277	126
150	8.676	8.660	33.996	26.385	166.0	0.319	151
175	8.409	8.391	34.034	26.457	159.7	0.360	176
200	8.285	8.264	34.060	26.496	156.3	0.399	202
225	8.108	8.085	34.114	26.565	150.2	0.437	227
250	7.679	7.654	34.088	26.608	146.3	0.474	252
275	7.130	7.104	34.068	26.670	140.5	0.510	277
300	7.051	7.023	34.125	26.726	135.6	0.545	302
305	6.939	6.911	34.110	26.730	135.3	0.552	307

CRUISE SQ87 LEG II STATION N 78

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
37 40.1 N	124 49.3 W	20/05/87	2211 GMT	4053 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
330	25 KT		2	1014.3 MB	13.5 C	11.2 C	8/8 SC

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	12.129	12.129	32.785	24.845	309.5	0.000	0
10	12.104	12.103	32.786	24.851	309.2	0.031	10
20	12.006	12.003	32.801	24.881	306.5	0.062	20
30	11.713	11.709	32.821	24.951	300.1	0.092	30
40	11.621	11.616	32.827	24.973	298.2	0.122	40
50	11.563	11.557	32.837	24.992	296.7	0.152	50
75	11.246	11.237	32.982	25.162	281.1	0.224	76
100	10.687	10.675	33.557	25.[illegible]	229.6	0.288	101
125	10.111	10.097	33.698	25.919	210.1	0.343	126
150	9.493	9.476	33.848	26.140	189.6	0.393	151
175	9.038	9.019	33.949	26.292	175.4	0.438	176
200	8.628	8.607	33.996	26.394	166.2	0.481	202
225	7.913	7.891	33.955	26.469	159.1	0.522	227
250	7.776	7.751	33.970	26.501	156.5	0.561	252
275	7.616	7.589	33.994	26.544	152.8	0.600	277
300	7.312	7.283	33.991	26.585	149.2	0.638	302

STATION N 80 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
37 36.3 N	124 37.5 W	21/05/87	0000 GMT	4008 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
340	22 KT		2	1014.2 MB	12.5 C	10.7 C	8/8 SC

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	12.114	12.114	32.812	24.869	307.2	0.000	0
10	12.106	12.105	32.813	24.872	307.2	0.031	10
20	12.103	12.100	32.814	24.873	307.3	0.061	20
30	12.053	12.049	32.821	24.888	306.2	0.092	30
40	11.189	11.184	32.946	25.144	282.0	0.122	40
50	10.914	10.908	32.985	25.223	274.7	0.149	50
75	9.348	9.340	33.396	25.808	219.4	0.211	76
100	9.664	9.653	33.789	26.064	195.7	0.263	101
125	9.294	9.280	33.893	26.207	182.6	0.310	126
150	8.949	8.933	33.955	26.311	173.2	0.355	151
175	8.603	8.585	34.000	26.400	165.1	0.397	176
200	8.400	8.379	34.029	26.454	160.3	0.438	202
225	7.578	7.556	33.981	26.538	152.4	0.477	227
250	7.375	7.351	34.003	26.585	148.3	0.514	252
275	7.295	7.269	34.031	26.618	145.6	0.551	277
300	7.211	7.182	34.045	26.641	143.7	0.587	302
305	7.183	7.154	34.045	26.645	143.4	0.595	307

CRUISE SQ87 LEG II STATION N 82

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
37 32.7 N	124 26.0 W	21/05/87	0134 GMT	3941 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
340	24 KT		2	1017.0 MB	11.7 C	10.0 C	8/8 SC

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	11.873	11.873	32.969	25.036	291.3	0.000	0
10	11.862	11.861	32.968	25.038	291.4	0.029	10
20	11.864	11.861	32.969	25.038	291.6	0.058	20
30	11.691	11.687	32.979	25.078	288.0	0.087	30
40	9.842	9.838	33.187	25.564	242.0	0.114	40
50	9.574	9.568	33.248	25.656	233.4	0.138	50
75	9.359	9.351	33.585	25.954	205.5	0.192	76
100	9.025	9.014	33.737	26.127	189.6	0.242	101
125	8.340	8.327	33.825	26.302	173.3	0.287	126
150	8.266	8.251	33.937	26.402	164.3	0.329	151
175	8.134	8.116	33.990	26.463	158.9	0.370	176
200	8.005	7.985	34.033	26.517	154.3	0.409	202
225	7.978	7.955	34.067	26.548	151.7	0.447	227
250	7.854	7.829	34.099	26.592	148.0	0.485	252
275	7.725	7.698	34.144	26.646	143.2	0.521	277
300	7.377	7.348	34.134	26.688	139.5	0.556	302
305	7.158	7.129	34.110	26.700	138.2	0.563	307

STATION N 84 RV NEW HORIZON

LATITUDE	LONGITUDE	DAY/MO/YR	START TIME	BOTTOM
37 29.0 N	124 14.7 W	21/05/87	0518 GMT	3742 M

WIND	SPEED	WAVES	WEA	BAROMETER	DRY	WET	CLOUDS
330	22 KT		2	1018.0 MB	11.1 C	9.8 C	8/8 SC

DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	PRESS D.BAR
0	12.321	12.321	33.339	25.239	272.0	0.000	0
10	12.328	12.327	33.342	25.240	272.2	0.027	10
20	12.107	12.104	33.353	25.291	267.6	0.054	20
30	11.241	11.237	33.473	25.544	243.7	0.080	30
40	10.779	10.774	33.447	25.606	238.0	0.104	40
50	10.115	10.109	33.410	25.692	230.0	0.127	50
75	8.762	8.754	33.645	26.096	192.0	0.180	76
100	8.550	8.540	33.817	26.264	176.5	0.226	101
125	8.382	8.369	33.921	26.371	166.7	0.269	126
150	8.199	8.184	33.984	26.449	159.8	0.310	151
175	7.503	7.486	33.976	26.544	151.0	0.349	176
200	7.477	7.458	34.024	26.586	147.4	0.386	202
225	7.296	7.275	34.024	26.612	145.3	0.423	227
250	7.213	7.189	34.053	26.647	142.4	0.459	252
275	6.831	6.806	34.041	26.690	138.5	0.494	277
300	6.484	6.457	34.026	26.724	135.4	0.528	302
307	6.415	6.388	34.030	26.737	134.3	0.537	309

CRUISE SQ87 LEG II

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 1

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 23.1 N	123 15.3 W	30/04/87	1601 GMT	90 M	160	09 KT	240 03 05	1	1016.8 MB	12.6 C	11.9 C	4/8	AS

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	10.93	10.93	33.083	25.296	266.6	0.000	7.59	121.1	3.7	0.44	1.4	0.07	14.77	1.49	0
1	1		10.93	10.93	33.083	25.296	266.6	0.003	7.59	121.1	3.7	0.44	1.4	0.07	14.77	1.49	1
	10	ISL	10.54	10.54	33.337	25.562	241.5	0.026	5.96	94.4	18.3	1.24	13.8	0.11	4.45	0.80	10
1	11		10.48	10.48	33.377	25.604	237.6	0.028	5.74	90.8	20.4	1.35	15.5	0.12	3.05	0.71	11
	20	ISL	10.12	10.12	33.580	25.824	216.9	0.048	5.69	89.4	23.5	1.46	17.6	0.08	2.91	0.95	20
1	22		10.05	10.05	33.612	25.860	213.4	0.053	5.68	89.2	24.2	1.48	18.1	0.07	2.88	1.04	22
	30	ISL	9.85	9.85	33.650	25.924	207.6	0.070	5.38	84.1	25.7	1.57	19.6	0.09	1.84	0.94	30
1	32		9.80	9.80	33.648	25.931	206.9	0.074	5.27	82.3	25.9	1.59	19.9	0.10	1.55	0.92	32
1	43		9.23	9.23	33.618	26.000	200.5	0.096	4.42	68.1	26.8	1.73	21.8	0.14	0.75	0.56	43
	50	ISL	9.06	9.05	33.644	26.048	196.1	0.110	3.98	61.1	27.4	1.78	23.0	0.14	0.39	0.36	50
1	53		9.01	9.00	33.661	26.069	194.1	0.116	3.84	58.9	27.7	1.80	23.5	0.14	0.28	0.30	53
1	63		8.79	8.78	33.711	26.143	187.3	0.135	3.66	55.9	28.9	1.84	24.3	0.09	0.15	0.24	64
	75	ISL	8.68	8.67	33.799	26.229	179.3	0.157	3.27	49.8	33.8	1.95	25.7	0.17	0.16	0.31	76
1	79		8.65	8.64	33.829	26.257	176.8	0.164	3.14	47.8	35.4	1.99	26.2	0.20	0.16	0.33	80

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 5

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 38.1 N	123 33.2 W	30/04/87	2017 GMT	113 M				2	1018.6 MB	14.1 C	13.9 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	12	10.14	10.14	33.480	25.742	224.5		5.87	92.2	22.2	1.36	16.2	0.11	2.62	0.63	12

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 7

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 45.4 N	123 41.5 W	30/04/87	2150 GMT	115 M				1	1018.3 MB	13.9 C	12.2 C	5/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0		10.67	10.67	33.353	25.55[illegible]	242.3	0.000	6.33	100.6	19.6	1.18	13.1	0.15	2.86	0.62	0
1	10		10.07	10.07	33.456	25.735	225.0	0.023	5.84	91.6	23.1	1.37	16.2	0.14	2.34	0.87	10
	20	ISL	9.81	9.81	33.511	25.822	217.0	0.045	5.44	84.9	25.0	1.54	18.1	0.11	1.89	0.82	20
1	26		9.70	9.70	33.538	25.861	213.4	0.058	5.19	80.8	25.9	1.62	19.1	0.10	1.59	0.79	26
	30	ISL	9.57	9.57	33.566	25.905	209.4	0.067	4.97	77.2	26.7	1.64	20.0	0.12	1.32	0.71	30
1	36		9.39	9.39	33.609	25.968	203.5	0.079	4.68	72.4	27.8	1.67	21.1	0.16	0.95	0.58	36
1	47		9.23	9.22	33.667	26.039	197.0	0.101	4.46	68.8	28.7	1.95U	22.0	0.16	0.69	0.50	47
	50	ISL	9.14	9.13	33.699	26.078	193.2	0.107	4.35	66.[illegible]	29.2	1.79	22.5	0.17	0.59	0.45	50
1	62		8.80	8.79	33.825	26.231	179.0	0.129	3.92	59.9	31.4	1.90	24.2	0.20	0.25	0.29	63
	75	ISL	8.62	8.61	33.871	26.295	173.1	0.152	3.67	55.9	32.5	1.97	24.6	0.19	0.19	0.31	76
1	78		8.59	8.58	33.875	26.303	172.4	0.158	3.62	55.1	32.8	1.98	24.6	0.19	0.18	0.32	79
	100	ISL	8.34	8.33	33.913	26.371	166.3	0.195	3.13	47.4	36.9	2.05	26.5	0.17	0.10	0.37	101
1	104		8.29	8.28	33.920	26.384	165.1	0.201	3.04	45.9	37.7	2.06	26.9	0.17	0.09	0.38	105

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 9

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 54.2 N	123 49.1 W	01/05/87	0000 GMT	110 M	160	10 KT	110 05 06	5	1017.7 MB	13.5 C	13.4 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	6	10.20	10.20	33.509	25.754	223.1		5.88	92.5	23.9	1.35	16.8	0.12			6

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 11

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
39 3.0 N	123 52.8 W	01/05/87	0125 GMT	120 M	150	14 KT	170 05 06	5	1017.4 MB	12.1 C	12.0 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	5	11.86	11.86	32.452	24.637	329.4		6.62	107.3	3.2	0.46	0.5	0.01	0.43	0.16	5

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 13

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
39 13.7 N	123 53.3 W	01/05/87	0307 GMT	128 M	170	19 KT	180 06 07	5	1016.9 MB	13.0 C	12.1 C	8/8	ST

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	11.90	11.90	32.429	24.612	331.7	0.000	6.68	108.4	2.5	0.46	0.3	0.00	0.25	0.16	0
1	1		11.90	11.90	32.429	24.612	331.8	0.003	6.68	108.4	2.5	0.46	0.3	0.00	0.25	0.16	1
	10	ISL	11.40	11.40	32.483	24.745	319.2	0.033	6.86	110.2	2.6	0.43	0.3	0.00	0.53	0.29	10
1	11		11.31	11.31	32.495	24.771	316.8	0.036	6.87	110.1	2.6	0.43	0.3	0.00	0.56	0.31	11
	20	ISL	10.54	10.54	32.654	25.030	292.3	0.063	6.56	103.5	7.3	0.81	3.8	0.14	3.35	0.81	20
1	21		10.46	10.46	32.678	25.062	289.3	0.066	6.49	102.2	8.0	0.86	4.4	0.15	3.57	0.85	21
	30	ISL	9.97	9.97	32.947	25.355	261.6	0.091	5.35	83.5	13.9	1.16	11.8	0.05	0.76	0.36	30
1	31		9.92	9.92	32.978	25.387	258.5	0.094	5.22	81.4	14.6	1.19	12.6	0.04	0.36	0.29	31
1	41		9.18	9.18	33.223	25.699	229.1	0.118	4.75	72.9	19.6	1.44	17.3	0.02	0.06	0.13	41
	50	ISL	9.12	9.11	33.350	25.808	218.9	0.138	4.47	68.6	21.8	1.54	19.0	0.02	0.05	0.13	50
1	51		9.11	9.10	33.356	25.815	218.3	0.140	4.45	68.3	22.0	1.55	19.1	0.02	0.05	0.13	51
1	61		8.95	8.94	33.423	25.892	211.1	0.162	4.31	65.9	23.2	1.60	20.1	0.04	0.10	0.14	61
1	71		9.02	9.01	33.620	26.036	197.7	0.182	4.17	64.0	29.9	1.77	22.5	0.20	0.34	0.31	72
	75	ISL	8.99	8.98	33.669	26.079	193.6	0.190	4.08	62.5	30.3	1.81	23.1	0.19	0.33	0.30	76
1	86		8.81	8.80	33.759	26.178	184.4	0.211	3.78	57.7	3 .4	1.88	24.5	0.09	0.31	0.26	87
	100	ISL	8.49	8.48	33.840	26.291	174.0	0.236	3.37	51.1	32.1	1.96	26.0	0.09	0.12	0.20	101
1	101		8.47	8.46	33.846	26.299	173.2	0.238	3.34	50.7	32.2	1.97	26.1	0.09	0.11	0.20	102

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 15

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
39 23.6 N	123 53.6 W	01/05/87	0513 GMT	110 M	180	15 KT		2	1015.5 MB	11.1 C	10.8 C	8/8	NS

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	7	11.69	11.69	32.464	24.678	325.6		6.83	110.4	2.2	0.41	0.2	0.01	1.36	0.23	7

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 17

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
39 34.2 N	123 54.9 W	01/05/87	0646 GMT	132 M	190	11 KT		1	1018.1 MB	11.1 C	10.6 C	6/8	NS

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	7	11.48	11.48	32.534	24.771	316.8		6.78	109.1	3.8	0.45	0.7	0.02	0.82	0.33	7

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 19

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
39 43.9 N	123 58.2 W	01/05/87	0820 GMT	157 M	250	07 KT		1	1018.5 MB	11.2 C	11.0 C	5/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	11.17	11.17	32.729	24.978	296.9	0.000	6.75	108.0	6.3	0.56	2.6	0.08	3.29	0.35	0
1	1		11.17	11.17	32.729	24.978	296.9	0.003	6.75	108.0	6.3	0.56	2.6	0.08	3.29	0.35	1
	10	ISL	11.15	11.15	32.751	24.999	295.1	0.030	6.74	107.8	6.6	0.58	2.8	0.09	3.73	0.33	10
1	12		11.14	11.14	32.756	25.004	294.6	0.036	6.74	107.8	6.7	0.59	2.9	0.09	3.87	0.32	12
	20	ISL	10.77	10.77	32.791	25.097	286.0	0.059	6.56	104.1	8.5	0.72	4.5	0.12	4.14	0.52	20
1	23		10.58	10.58	32.832	25.162	279.9	0.067	6.42	101.5	9.9	0.80	5.8	0.13	4.24	0.59	23
	30	ISL	10.16	10.16	33.078	25.425	255.0	0.086	5.86	91.9	16.0	1.11	11.5	0.16	2.29	0.57	30
1	32		10.02	10.02	33.154	25.508	247.1	0.091	5.66	88.5	17.8	1.21	13.3	0.16	1.66	0.56	32
1	43		8.98	8.98	33.394	25.865	213.3	0.116	4.43	67.8	22.4	1.57	19.7	0.07	0.18	0.21	43
	50	ISL	8.77	8.76	33.498	25.979	202.6	0.131	4.14	63.1	24.6	1.66	21.5	0.06	0.12	0.18	50
1	54		8.73	8.72	33.545	26.022	198.6	0.139	4.06	61.8	25.6	1.69	22.1	0.06	0.08	0.16	54
1	65		8.62	8.61	33.649	26.121	189.4	0.160	3.77	57.3	28.1	1.76	23.2	0.06	0.10	0.18	66
1	74		8.36	8.35	33.792	26.273	175.1	0.177	3.41	51.6	33.3	1.91	26.0	0.07	0.10	0.19	75
	75	ISL	8.34	8.33	33.803	26.284	174.1	0.178	3.38	51.1	33.7	1.92	26.2	0.07	0.10	0.20	76
1	91		8.21	8.20	33.905	26.384	164.9	0.205	3.10	46.8	38.0	2.05	27.7	0.15	0.18	0.34	92
	100	ISL	8.19	8.18	33.910	26.391	164.4	0.220	3.09	46.6	38.2	2.07	27.8	0.16	0.19	0.36	101
1	106		8.18	8.17	33.916	26.397	163.9	0.230	3.08	46.4	38.3	2.08	27.9	0.16	0.19	0.37	107
	125	ISL	8.14	8.13	33.928	26.413	162.7	0.261	3.00	45.2	38.8	2.10	28.0	0.15	0.16	0.36	126
1	132		8.12	8.11	33.932	26.419	162.3	0.273	2.97	44.7	39.0	2.11	28.1	0.14	0.15	0.36	133

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 21

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
39 52.8 N	124 5.3 W	01/05/87	1006 GMT	125 M	250	08 KT		1	1018.7 MB	10.0 C	10.0 C	5/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	6	10.75	10.75	32.875	25.166	279.2		6.68	106.0	9.0	0.66	4.0	0.10	7.40	0.65	6

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 23

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
40 1.5 N	124 12.0 W	01/05/87	1145 GMT	659 M	180	04 KT		1	1019.2 MB	10.8 C	10.8 C	3/8	CU

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	6	10.52	10.52	32.932	25.250	271.1		6.62	104.6	9.5	0.72	4.9	0.10	9.23	1.06	6

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 25

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
40 8.6 N	124 20.2 W	01/05/87	1328 GMT	210 M	190	06 KT	270 05 08	1	1019.5 MB	10.1 C	9.6 C	2/8	ST

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	10.58	10.58	33.139	25.401	256.6	0.000	6.62	104.8	12.5	0.86	7.7	0.12	8.76	0.74	0
1	1		10.58	10.58	33.139	25.401	256.7	0.003	6.62	104.8	12.5	0.86	7.7	0.12	8.76	0.74	1
	10	ISL	10.58	10.58	33.139	25.401	256.8	0.026	6.54	103.6	13.4	0.92	8.6	0.11	6.95	1.24	10
1	11		10.58	10.58	33.139	25.401	256.9	0.028	6.53	103.4	13.5	0.93	8.7	0.11	6.74	1.30	11
	20	ISL	10.28	10.28	33.196	25.497	247.9	0.051	6.39	100.6	14.4	0.99	9.6	0.11	7.98	1.05	20
1	21		10.23	10.23	33.207	25.514	246.3	0.053	6.38	100.3	14.5	1.00	9.7	0.11	8.05	1.01	21
	30	ISL	9.63	9.63	33.362	25.735	225.5	0.075	5.38	83.5	21.9	1.39	16.3	0.12	3.57	0.94	30
1	32		9.49	9.49	33.399	25.787	220.6	0.079	5.13	79.4	23.6	1.48	17.9	0.12	2.43	0.91	32
1	42		9.08	9.08	33.503	25.934	206.7	0.100	4.53	69.5	26.6	1.64	20.8	0.11	0.87	0.45	42
	50	ISL	8.87	8.86	33.594	26.039	197.0	0.117	4.11	62.8	29.0	1.75	22.7	0.10	0.60	0.43	50
1	54		8.80	8.79	33.631	26.079	193.3	0.124	3.95	60.3	30.0	1.79	23.3	0.10	0.47	0.42	54
1	63		8.71	8.70	33.660	26.115	189.9	0.142	3.83	58.3	30.7	1.82	23.7	0.13	0.36	0.86	64
1	74		8.51	8.50	33.733	26.204	181.7	0.162	3.53	53.6	32.9	1.91	25.2	0.08	0.25	0.84	75
	75	ISL	8.49	8.48	33.739	26.211	181.0	0.164	3.51	53.2	33.1	1.92	25.3	0.08	0.24	0.81	76
1	88		8.30	8.29	33.809	26.295	173.3	0.187	3.26	49.2	35.6	1.99	26.5	0.07	0.17	0.34	89
	100	ISL	8.20	8.19	33.847	26.340	169.2	0.208	3.13	47.2	37.0	2.03	27.2	0.06	0.13	0.31	101
1	109		8.16	8.15	33.866	26.361	167.4	0.223	3.06	46.1	37.7	2.06	27.5	0.06	0.11	0.29	110
	125	ISL	8.12	8.11	33.899	26.393	164.6	0.249	2.92	43.9	38.9	2.11	28.1	0.06	0.10	0.34	126
1	135		8.10	8.09	33.916	26.410	163.2	0.266	2.85	42.9	39.5	2.14	28.4	0.06	0.10	0.38	136
	150	ISL	8.00	7.98	33.934	26.439	160.7	0.290	2.79	41.9	40.5	2.16	28.8	0.05	0.10	0.34	151
1	161		7.92	7.90	33.948	26.462	158.7	0.307	2.75	41.2	41.3	2.18	29.1	0.04	0.10	0.31	162

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 27

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
40 18.2 N	124 28.3 W	01/05/87	1530 GMT	313 M				1	1017.9 MB	9.4 C	8.9 C	2/8	CC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	7	10.44	10.44	33.261	25.520	245.5		5.94	93.8	18.9	1.14	12.4	0.14	1.96	0.49	7

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 29

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
40 26.6 N	124 33.3 W	01/05/87	1647 GMT	90 M	180	08 KT	280 05 06	1	1020.7 MB	12.6 C	12.0 C	4/8	AC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	5	10.05	10.05	33.361	25.664	231.7		5.65	88.6	23.8	1.43	16.5	0.17	1.08	0.44	5

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 30

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
40 19.7 N	124 41.0 W	01/05/87	1928 GMT	1304 M	170	06 KT	280 05 06	1	1021.5 MB	14.2 C	14.1 C	5/8	AC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	10.90	10.90	33.237	25.421	254.7	0.000	6.26	99.9	18.6	1.14	12.5	0.15	3.55	0.96	0
1	1		10.90	10.90	33.237	25.421	254.7	0.003	6.26	99.9	18.6	1.14	12.5	0.15	3.55	0.96	1
	10	ISL	10.23	10.23	33.274	25.566	241.1	0.025	6.03	94.8	20.1	1.25	14.0	0.16	2.35	0.85	10
1	11		10.13	10.13	33.281	25.588	239.0	0.027	5.99	94.0	20.3	1.27	14.2	0.16	2.17	0.83	11
	20	ISL	9.95	9.95	33.310	25.641	234.2	0.049	5.72	89.4	21.3	1.36	15.3	0.16	1.67	0.65	20
1	22		9.93	9.93	33.317	25.650	233.4	0.053	5.66	88.4	21.6	1.38	15.5	0.16	1.61	0.61	22
	30	ISL	9.71	9.71	33.367	25.726	226.4	0.072	5.41	84.1	23.3	1.45	16.9	0.18	1.25	0.5[illegible]	30
1	32		9.65	9.65	33.381	25.747	224.4	0.076	5.34	83.0	23.7	1.47	17.3	0.19	1.17	0.56	32
1	43		9.27	9.27	33.461	25.871	212.8	0.100	4.83	74.4	25.6	1.59	19.6	0.17	0.72	0.39	43
	50	ISL	9.01	9.00	33.522	25.960	204.4	0.115	4.44	68.0	27.0	1.68	21.2	0.14	0.50	0.36	50
1	53		8.91	8.90	33.551	25.999	200.8	0.121	4.28	65.5	27.7	1.72	21.9	0.13	0.43	0.35	53
1	63		8.68	8.67	33.652	26.114	190.1	0.140	3.95	60.1	30.7	1.82	23.7	0.13	0.31	0.31	64
1	73		8.62	8.61	33.673	26.140	187.8	0.159	3.86	58.7	31.3	1.84	24.2	0.13	0.30	0.44	74
	75	ISL	8.57	8.56	33.689	26.160	185.9	0.163	3.79	57.6	31.8	1.86	24.5	0.13	0.29	0.43	76
1	89		8.18	8.17	33.810	26.314	171.5	0.188	3.29	49.6	36.1	1.99	27.0	0.10	0.17	0.29	90
	100	ISL	8.01	8.00	33.856	26.375	165.8	0.207	3.14	47.1	38.7	2.07	28.1	0.11	0.13	0.31	101
1	104		7.97	7.96	33.867	26.390	164.5	0.213	3.11	46.6	39.4	2.09	28.4	0.11	0.12	0.33	105
1	125		7.83	7.82	33.900	26.437	160.4	0.247	2.91	43.5	41.3	2.13	29.2	0.11	0.11	0.30	126
1	150		7.78	7.77	33.912	26.454	159.2	0.287	2.87	42.9	41.8	2.14	29.5	0.11	0.13	0.31	151
1	181		7.66	7.64	33.935	26.490	156.3	0.336	2.80	41.7	43.4	2.19	30.2	0.12			183
	200	ISL	7.60	7.58	33.947	26.508	154.9	0.366	2.76	41.0	44.1	2.20	30.3	0.10			202
1	210		7.57	7.55	33.953	26.517	154.2	0.381	2.73	40.6	44.4	2.21	30.3	0.09			212
1	240		7.42	7.40	33.980	26.560	150.6	0.427	2.61	38.7	46.0	2.25	30.9	0.07			242
	250	ISL	7.27	7.25	33.995	26.593	147.5	0.442	2.47	36.5	48.3	2.31	31.8	0.06			252
1	280		6.82	6.79	34.040	26.691	138.5	0.485	2.05	30.0	55.3	2.48	34.5	0.05			282
	300	ISL	6.80	6.77	34.042	26.695	138.4	0.512	1.99	29.1	55.9	2.49	34.7	0.04			303
1	336		6.76	6.73	34.047	26.705	138.0	0.562	1.89	27.6	56.9	2.51	35.0	0.03			339
1	397		6.29	6.25	34.060	26.778	131.6	0.644	1.72	24.8	63.4	2.62	37.1	0.01			401
	400	ISL	6.27	6.23	34.062	26.782	131.3	0.648	1.70	24.5	63.9	2.63	37.2	0.01			404
1	462		5.78	5.74	34.121	26.890	121.4	0.727	1.13	16.1	75.6	2.85	40.4	0.01			466
	500	ISL	5.43	5.39	34.169	26.971	113.9	0.771	0.89	12.6	84.1	2.96	41.9	0.00			505
1	535		5.10	5.06	34.214	27.046	106.9	0.810	0.66	9.3	91.9	3.06	43.3	0.00			540

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 32

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
40 9.8 N	124 33.4 W	01/05/87	2230 GMT	653 M	210	05 KT		1	1021.7 MB	12.1 C	9.8 C	3/8	AC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	6	10.44	10.44	33.014	25.327	263.8		7.05	111.2	10.6	0.72	4.3	0.14	10.65	1.24	6

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 34

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
40 0.3 N	124 26.7 W	02/05/87	0055 GMT	946 M	270	05 KT	270 08 06	1	1021.8 MB	13.5 C	13.5 C	3/8	AC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	11.88	11.88	33.005	25.063	288.8	0.000	6.96	113.3	10.6	0.71	4.4	0.13	3.78	0.57	0
1	1		11.88	11.88	33.005	25.063	288.8	0.003	6.96	113.3	10.6	0.71	4.4	0.13	3.78	0.57	1
	10	ISL	10.71	10.71	32.988	25.260	270.2	0.028	6.42	101.9	12.2	0.88	6.6	0.16	1.10	0.45	10
1	11		10.53	10.53	32.991	25.294	267.0	0.031	6.31	99.7	12.4	0.91	6.9	0.16	0.73	0.43	11
	20	ISL	9.65	9.65	33.130	25.551	242.8	0.054	5.04	78.2	19.4	1.36	14.4	0.21	0.62	0.36	20
1	22		9.53	9.53	33.177	25.607	237.5	0.058	4.80	74.3	21.1	1.46	16.1	0.22	0.59	0.34	22
	30	ISL	9.55	9.55	33.434	25.804	218.9	0.077	4.97	77.1	25.7	1.61	19.1	0.24	0.54	0.48	30
1	32		9.56	9.56	33.485	25.843	215.3	0.081	5.01	77.7	26.6	1.63	19.5	0.24	0.53	0.52	32
1	43		9.37	9.37	33.554	25.928	207.4	0.104	4.76	73.6	28.1	1.70	21.1	0.24	0.38	0.49	43
	50	ISL	9.14	9.13	33.587	25.990	201.6	0.119	4.33	66.6	29.4	1.77	22.3	0.27	0.29	0.41	50
1	53		9.03	9.02	33.606	26.023	198.6	0.125	4.14	63.5	30.1	1.81	22.9	0.28	0.26	0.37	53
1	63		8.63	8.62	33.733	26.185	183.3	0.144	3.79	57.7	33.1	1.95	25.1	0.22	0.19	0.30	64
1	74		8.53	8.52	33.783	26.240	178.3	0.164	3.76	57.1	34.3	1.99	26.0	0.18	0.19	0.37	75
	75	ISL	8.51	8.50	33.785	26.244	177.9	0.165	3.75	56.9	34.5	1.99	26.1	0.18	0.19	0.36	76
1	89		8.17	8.16	33.814	26.319	171.0	0.190	3.54	53.3	37.0	2.02	27.2	0.19	0.15	0.25	90
	100	ISL	7.96	7.95	33.862	26.388	164.7	0.208	3.51	52.6	35.7	1.97	26.9	0.08	0.07	0.34	101
1	105		7.88	7.87	33.885	26.417	161.9	0.216	3.50	52.4	35.1	1.95	26.8	0.02	0.03	0.38	106
1	125		7.68	7.67	33.954	26.501	154.3	0.248	3.24	48.3	38.9	2.03	28.2	0.02	0.02	0.12	126
	150	ISL	7.44	7.43	33.977	26.554	149.6	0.286	2.96	43.9	42.9	2.20	29.6	0.01	0.03	0.12	151
1	151		7.43	7.42	33.977	26.555	149.5	0.288	2.95	43.7	43.1	2.21	29.7	0.01	0.03	0.12	152
1	182		7.24	7.22	34.006	26.605	145.2	0.333	2.52	37.2	48.9	2.30	31.8	0.01			184
	200	ISL	7.15	7.13	34.018	26.627	143.4	0.359	2.40	35.3	50.4	2.31	32.4	0.01			202
1	213		7.06	7.04	34.025	26.645	141.9	0.378	2.35	34.5	51.2	2.32	32.8	0.01			215
1	244		6.66	6.64	34.033	26.706	136.4	0.421	2.20	32.0	54.7	2.39	34.2	0.01			246
	250	ISL	6.58	6.56	34.037	26.720	135.1	0.429	2.13	30.9	56.0	2.42	34.6	0.01			252
1	285		6.19	6.17	34.066	26.794	128.4	0.475	1.67	24.0	63.8	2.61	37.2	0.01			287
	300	ISL	6.11	6.08	34.074	26.810	127.0	0.494	1.55	22.3	65.6	2.65	37.7	0.01			303
1	341		5.94	5.91	34.092	26.846	124.0	0.546	1.38	19.8	69.4	2.71	38.7	0.01			344
	400	ISL	5.58	5.55	34.118	26.912	118.4	0.617	1.40	19.9	76.3	2.85	40.8	0.01			404
1	403		5.56	5.53	34.119	26.915	118.1	0.621	1.40	19.9	76.7	2.86	40.9	0.01			407
1	469		5.21	5.17	34.169	26.997	110.8	0.696	0.70	9.8	85.5	2.99	42.6	0.01			473
	500	ISL	5.09	5.05	34.194	27.031	107.8	0.730	0.59	8.3	89.0	3.03	43.1	0.01			505
1	540		4.94	4.90	34.226	27.073	104.1	0.773	0.45	6.3	93.6	3.09	43.7	0.00			545

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 36

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
39 51.8 N	124 19.4 W	02/05/87	0333 GMT	1325 M	280	07 KT		1	1020.2 MB	11.1 C	10.3 C	1/8	AC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	7		10.49	10.49	33.221	25.480	249.3		7.15	113.1	14.2	0.81	6.9	0.19	8.28	0.63	7

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 38

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
39 42.7 N	124 13.8 W	02/05/87	0528 GMT	1269 M	280	06 KT		1	1021.0 MB	11.1 C	9.4 C	1/8	CU

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	6		10.71	10.71	32.994	25.265	269.6		6.88	109.2	10.4	0.73	5.5	0.10	7.04	1.15	6

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 40

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
39 33.7 N	124 6.6 W	02/05/87	0729 GMT	984 M	340	03 KT		1	1023.0 MB	12.7 C	12.1 C	2/8	CU

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	12.14	12.14	32.459	24.590	333.8	0.000	6.54	106.7	2.7	0.46	0.0	0.01	0.33	0.13	0
1	2		12.14	12.14	32.459	24.591	333.8	0.007	6.54	106.7	2.7	0.46	0.0	0.01	0.33	0.13	2
	10	ISL	11.86	11.86	32.464	24.647	328.6	0.033	6.58	106.7	2.4	0.47	0.0	0.01	0.53	0.14	10
1	11		11.81	11.81	32.465	24.657	327.7	0.036	6.59	106.8	2.4	0.47	0.0	0.01	0.57	0.14	11
	20	ISL	11.57	11.57	32.484	24.716	322.3	0.066	6.73	108.5	2.9	0.47	0.0	0.02	0.89	0.33	20
1	22		11.50	11.50	32.491	24.734	320.6	0.072	6.74	108.5	3.0	0.47	0.0	0.02	0.97	0.38	22
	30	ISL	10.88	10.88	32.531	24.875	307.3	0.097	6.48	102.9	4.6	0.65	1.4	0.25	1.33	0.57	30
1	32		10.73	10.73	32.542	24.910	304.0	0.103	6.40	101.3	5.1	0.70	1.9	0.31	1.37	0.60	32
1	43		10.47	10.47	32.572	24.979	297.7	0.136	6.11	96.2	7.0	0.83	4.3	0.34	0.63	0.45	43
	50	ISL	10.28	10.27	32.658	25.078	288.4	0.157	5.78	90.7	9.7	0.96	6.9	0.15	0.31	0.21	50
1	53		10.20	10.19	32.708	25.130	283.5	0.166	5.63	88.2	11.0	1.02	8.1	0.06	0.22	0.12	53
1	63		9.91	9.90	32.902	25.330	264.6	0.193	5.25	81.8	14.2	1.20	11.5	0.04	0.17	0.18	64
1	74		9.52	9.51	33.093	25.544	244.5	0.221	4.78	73.9	18.5	1.37	15.2	0.03	0.15	0.20	75
	75	ISL	9.50	9.49	33.108	25.559	243.1	0.223	4.75	73.4	18.8	1.38	15.4	0.04	0.15	0.20	76
1	90		9.13	9.12	33.304	25.771	223.2	0.258	4.48	68.7	23.0	1.56	18.5	0.14	0.20	0.16	91
	100	ISL	8.64	8.63	33.420	25.939	207.4	0.280	4.38	66.5	24.7	1.64	20.7	0.07	0.14	0.15	101
1	104		8.45	8.44	33.467	26.005	201.1	0.288	4.34	65.6	25.4	1.67	21.5	0.04	0.11	0.15	105
	125	ISL	8.08	8.07	33.749	26.281	175.2	0.328	3.78	56.8	31.2	1.82	25.1	0.01	0.06	0.16	126
1	126		8.07	8.06	33.761	26.292	174.2	0.329	3.75	56.3	31.5	1.83	25.3	0.01	0.06	0.16	127
	150	ISL	7.98	7.97	33.927	26.437	160.9	0.370	2.97	44.6	38.8	2.07	28.8	0.00	0.05	0.13	151
1	152		7.97	7.95	33.935	26.444	160.2	0.373	2.91	43.7	39.4	2.09	29.0	0.00	0.05	0.13	153
1	182		7.50	7.48	33.990	26.556	150.0	0.419	2.74	40.7	43.8	2.22	30.7	0.00			184
	200	ISL	7.26	7.24	34.001	26.599	146.2	0.446	2.63	38.8	46.4	2.27	31.7	0.00			202
1	213		7.11	7.09	34.002	26.620	144.2	0.465	2.58	37.9	48.1	2.29	32.3	0.00			215
1	245		6.77	6.75	33.994	26.661	140.8	0.510	2.61	38.1	51.1	2.29	33.0	0.00			247
	250	ISL	6.74	6.72	33.996	26.666	140.3	0.517	2.57	37.5	51.6	2.30	33.2	0.00			252
1	287		6.57	6.54	34.020	26.708	136.8	0.569	2.18	31.7	56.1	2.45	35.2	0.00			290
	300	ISL	6.46	6.43	34.033	26.733	134.6	0.586	2.01	29.1	58.8	2.52	36.0	0.00			303
1	344		6.05	6.02	34.074	26.818	126.8	0.644	1.48	21.2	67.8	2.74	38.8	0.00			347
	400	ISL	5.68	5.65	34.087	26.875	121.9	0.715	1.21	17.2	74.0	2.85	41.0	0.00			404
1	405		5.65	5.62	34.087	26.879	121.6	0.720	1.20	17.1	74.4	2.85	41.2	0.00			409
1	472		5.16	5.12	34.094	26.943	115.8	0.799	0.96	13.5	82.5	2.96	43.4	0.00			476
	500	ISL	5.10	5.06	34.131	26.979	112.7	0.831	0.81	11.4	86.2	3.02	44.0	0.00			505
1	543		5.02	4.98	34.189	27.035	107.9	0.878	0.58	8.1	91.8	3.10	44.8	0.00			548

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 42

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
40 5.5 N	124 44.4 W	02/05/87	1410 GMT	969 M	160	11 KT	290 06 10	2	1022.8 MB	11.2 C	10.9 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	7	10.87	10.87	33.322	25.492	248.1		6.41	102.3	19.4	1.14	13.0	0.16	3.61	0.74	7

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 44

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
39 55.2 N	124 36.5 W	02/05/87	1626 GMT	1172 M	140	10 KT	290 07 09	2	1023.6 MB	10.8 C	10.7 C	8/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	11.17	11.17	32.950	25.149	280.5	0.000	6.23	99.8	12.2	0.91	5.4	0.13	1.07	0.31	0
1	1		11.17	11.17	32.950	25.150	280.6	0.003	6.23	99.8	12.2	0.91	5.4	0.13	1.07	0.31	1
	10	ISL	10.87	10.87	32.968	25.217	274.3	0.028	6.24	99.3	12.5	0.94	5.8	0.13	0.86	0.32	10
1	11		10.80	10.80	32.963	25.225	273.6	0.031	6.24	99.2	12.5	0.94	5.8	0.13	0.85	0.32	11
	20	ISL	9.86	9.86	33.214	25.582	239.9	0.054	5.51	85.9	17.9	1.27	11.5	0.22	1.35	0.47	20
1	22		9.65	9.65	33.278	25.666	231.9	0.058	5.32	82.6	19.4	1.35	13.0	0.24	1.43	0.51	22
	30	ISL	9.39	9.39	33.403	25.806	218.7	0.076	4.82	74.5	23.4	1.56	17.5	0.24	0.71	0.59	30
1	32		9.36	9.36	33.426	25.829	216.5	0.081	4.73	73.0	24.3	1.60	18.4	0.24	0.50	0.60	32
1	43		9.15	9.15	33.553	25.962	204.1	0.104	4.50	69.2	28.4	1.77	20.6	0.30	0.42	0.62	43
	50	ISL	8.84	8.83	33.619	26.063	194.7	0.118	4.06	62.0	31.2	1.86	23.0	0.35	0.28	0.55	50
1	53		8.70	8.69	33.644	26.104	190.8	0.124	3.86	58.8	32.2	1.90	24.0	0.37	0.22	0.50	53
1	64		8.35	8.34	33.723	26.220	180.0	0.144	3.44	52.0	33.1	2.00	26.6	0.10	0.10	0.28	65
1	74		8.12	8.11	33.783	26.302	172.4	0.162	3.17	47.7	36.3	2.03	27.2	0.04	0.07	0.34	75
	75	ISL	8.10	8.09	33.789	26.309	171.6	0.163	3.15	47.4	36.5	2.03	27.3	0.04	0.07	0.34	76
1	90		7.80	7.79	33.874	26.420	161.4	0.188	2.94	43.9	39.3	2.09	29.5	0.0	0.05	0.22	91
	100	ISL	7.60	7.59	33.921	26.486	155.2	0.204	2.87	42.7	41.3	2.13	30.5	0.03	0.04	0.16	101
1	105		7.52	7.51	33.939	26.512	152.9	0.212	2.85	42.3	42.1	2.15	30.9	0.02	0.04	0.14	106
	125	ISL	7.42	7.41	33.959	26.542	150.3	0.242	2.86	42.4	42.6	2.13	31.0	0.03	0.03	0.17	126
1	126		7.42	7.41	33.959	26.542	150.3	0.244	2.86	42.4	42.6	2.13	31.0	0.03	0.03	0.17	127
	150	ISL	7.09	7.08	33.999	26.620	143.3	0.279	2.46	36.2	49.0	2.29	33.5	0.01	0.02	0.13	151
1	152		7.06	7.05	34.002	26.626	142.7	0.282	2.42	35.6	49.6	2.31	33.7	0.01	0.02	0.13	153
1	182		6.78	6.76	34.022	26.681	137.9	0.324	2.21	32.3	53.5	2.40	35.3	0.02			184
	200	ISL	6.62	6.60	34.033	26.711	135.2	0.348	2.05	29.8	55.9	2.46	35.9	0.01			202
1	213		6.51	6.49	34.039	26.730	133.6	0.366	1.94	28.1	57.7	2.50	36.3	0.00			215
1	244		6.28	6.26	34.047	26.767	130.4	0.407	1.73	25.0	62.0	2.59	37.7	0.01			246
	250	ISL	6.23	6.21	34.050	26.776	129.7	0.415	1.68	24.2	62.9	2.61	38.0	0.01			252
1	285		5.98	5.96	34.069	26.823	125.6	0.459	1.41	20.2	67.7	2.72	39.9	0.00			287
	300	ISL	5.90	5.87	34.079	26.841	124.0	0.478	1.32	18.9	69.5	2.76	40.5	0.00			303
1	341		5.68	5.65	34.104	26.888	119.9	0.528	1.09	15.5	74.5	2.87	42.1	0.00			344
	400	ISL	5.29	5.26	34.132	26.957	113.8	0.597	0.81	11.4	82.9	2.99	44.2	0.00			404
1	402		5.28	5.25	34.133	26.959	113.6	0.599	0.80	11.3	83.2	2.99	44.3	0.00			406
1	468		4.93	4.89	34.174	27.032	107.1	0.672	0.56	7.8	91.6	3.08	46.2	0.00			472
	500	ISL	4.84	4.80	34.197	27.061	104.7	0.706	0.48	6.7	94.7	3.11	46.7	0.00			505
1	540		4.72	4.68	34.226	27.098	101.5	0.747	0.39	5.4	98.5	3.15	47.3	0.00			545

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 48

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
39 39.0 N	124 21.8 W	02/05/87	2212 GMT	1795 M	260	07 KT		1	1023.8 MB	13.9 C	11.7 C	6/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	11	10.45	10.45	32.886	25.226	273.5		8.02	126.4	2.3	0.44	0.2	0.02	10.41	1.98	11

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 50

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
39 30.3 N	124 15.6 W	03/05/87	0017 GMT	1024 M	310	10 KT	310 05 07	0	1022.7 MB	17.2 C	16.1 C	0/8	

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	13.59	13.59	32.549	24.378	354.0	0.000	6.37	107.2	2.5	0.45	0.1	0.01	0.19	0.07	0
1	1		13.59	13.59	32.549	24.378	354.1	0.004	6.37	107.2	2.5	0.45	0.1	0.01	0.19	0.07	1
	10	ISL	12.48	12.48	32.528	24.580	335.0	0.035	6.44	105.9	2.7	0.45	0.1	0.00	0.21	0.08	10
1	11		12.32	12.32	32.526	24.609	332.3	0.038	6.45	105.7	2.7	0.45	0.1	0.00	0.21	0.08	11
	20	ISL	12.16	12.16	32.521	24.635	330.0	0.068	6.45	105.3	2.6	0.47	0.1	0.00	0.24	0.17	20
1	22		12.13	12.13	32.520	24.640	329.6	0.074	6.45	105.2	2.6	0.47	0.1	0.00	0.25	0.19	22
	30	ISL	12.09	12.09	32.526	24.653	328.6	0.101	6.45	105.1	2.7	0.46	0.1	0.01	0.30	0.17	30
1	32		12.08	12.08	32.528	24.656	328.3	0.107	6.45	105.1	2.7	0.46	0.1	0.01	0.31	0.17	32
1	43		11.80	11.79	32.544	24.721	322.4	0.143	6.44	104.3	3.3	0.51	0.4	0.08	0.41	0.16	43
	50	ISL	10.99	10.98	32.543	24.866	308.7	0.165	6.38	101.6	4.8	0.64	2.1	0.48	0.37	0.17	50
1	53		10.65	10.64	32.546	24.927	302.8	0.174	6.34	100.2	5.6	0.70	3.0	0.62	0.34	0.17	53
1	64		10.40	10.39	32.567	24.987	297.4	0.207	6.02	94.6	7.6	0.85	5.9	0.10	0.17	0.12	65
1	74		9.95	9.94	32.875	25.303	267.5	0.235	5.30	82.6	14.0	1.17	11.7	0.05	0.08	0.10	75
	75	ISL	9.87	9.86	32.905	25.340	264.0	0.238	5.23	81.4	14.6	1.20	12.3	0.05	0.08	0.10	76
1	89		8.90	8.89				0.272	4.41	67.3	22.6	1.58	19.6	0.04	0.06	0.15	90
	100	ISL	8.76	8.75	33.501	25.984	203.1	0.296	4.05	61.7	27.6	1.76	22.6	0.18	0.10	0.23	101
1	105		8.70	8.69	33.589	26.062	195.8	0.306	3.92	59.7	29.5	1.82	23.5	0.23	0.11	0.25	106
1	125		8.27	8.26	33.809	26.300	173.5	0.342	3.23	48.8	34.6	1.99	26.8	0.02	0.02	0.12	126
	150	ISL	8.05	8.03	33.897	26.403	164.2	0.385	3.16	47.5	35.5	2.00	27.4	0.02	0.01	0.11	151
1	151		8.04	8.02	33.898	26.405	164.0	0.386	3.16	47.5	35.5	2.00	27.4	0.02	0.01	0.11	152
1	181		7.48	7.46	33.949	26.526	152.8	0.434	3.22	47.8	39.6	2.05	28.6	0.02			183
	200	ISL	7.27	7.25	33.964	26.568	149.1	0.462	3.15	46.5	41.9	2.09	29.4	0.01			202
1	212		7.16	7.14	33.971	26.589	147.2	0.480	3.05	44.9	43.7	2.13	30.1	0.01			214
1	242		6.80	6.78	34.001	26.662	140.6	0.523	2.53	36.9	50.7	2.31	32.8	0.01			244
	250	ISL	6.73	6.71	34.002	26.672	139.7	0.535	2.48	36.1	51.7	2.33	33.2	0.01			252
1	282		6.52	6.49	34.004	26.702	137.3	0.579	2.34	33.9	54.8	2.40	34.3	0.01			284
	300	ISL	6.44	6.41	34.025	26.729	134.9	0.603	2.11	30.5	57.8	2.48	35.3	0.01			303
1	338		6.27	6.24	34.074	26.790	129.5	0.654	1.60	23.1	64.6	2.65	37.5	0.01			341
1	399		5.76	5.73	34.095	26.872	122.3	0.730	1.17	16.7	73.9	2.84	39.9	0.00			403
	400	ISL	5.75	5.72	34.095	26.873	122.2	0.732	1.16	16.5	74.0	2.84	39.9	0.00			404
1	464		5.29	5.25	34.125	26.952	115.0	0.808	0.87	12.3	82.6	2.99	42.0	0.00			468
	500	ISL	5.20	5.16	34.157	26.989	111.9	0.848	0.72	10.1	86.1	3.04	42.6	0.00			505
1	536		5.11	5.07	34.190	27.025	108.8	0.888	0.58	8.1	89.6	3.08	43.2	0.00			541

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 52

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
39 20.8 N	124 9.4 W	03/05/87	0311 GMT	890 M	320	10 KT		1	1023.1 MB	13.3 C	12.4 C	2/8	CI

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	10	12.34	12.34	32.560	24.631	330.1		6.34	103.9	2.2	0.48	0.1	0.00	0.23	0.07	10

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 54

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
39 11.0 N	124 5.7 W	03/05/87	0459 GMT	831 M	320	15 KT			1023.9 MB	12.2 C	11.7 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	11	11.89	11.89	32.464	24.641	329.2		6.56	106.4	2.7	0.46	0.0	0.01	0.32	0.15	11

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 56

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
39 1.0 N	124 4.0 W	03/05/87	0656 GMT	771 M	340	15 KT			1022.8 MB	13.2 C	13.0 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	12.57	12.57	32.418	24.477	344.5	0.000	6.57	108.1	2.8	0.46	0.1	0.01	0.19	0.07	0
1	1	12.57	12.57	32.418	24.477	344.6	0.003	6.57	108.1	2.8	0.46	0.1	0.01	0.19	0.07	1
	10 ISL	12.55	12.55	32.419	24.482	344.3	0.034	6.59	108.4	2.6	0.46	0.1	0.01	0.19	0.08	10
1	12	12.54	12.54	32.419	24.484	344.2	0.041	6.59	108.4	2.5	0.48	0.1	0.01	0.19	0.08	12
	20 ISL	12.08	12.08	32.427	24.577	335.5	0.069	6.69	109.0	2.5	0.49	0.1	0.02	0.21	0.12	20
1	22	11.89	11.89	32.438	24.621	331.3	0.075	6.71	108.9	2.5	0.49	0.1	0.02	0.22	0.14	22
	30 ISL	10.72	10.72	32.577	24.939	301.2	0.100	6.21	98.3	6.6	0.77	3.3	0.29	0.58	0.27	30
1	31	10.58	10.58	32.598	24.979	297.4	0.103	6.14	96.9	7.2	0.81	3.8	0.32	0.62	0.28	31
1	42	10.26	10.26	32.758	25.159	280.5	0.135	5.79	90.8	10.5	0.98	7.1	0.18	0.51	0.25	42
	50 ISL	9.96	9.95	32.885	25.309	266.4	0.157	5.40	84.2	13.3	1.16	10.0	0.14	0.53	0.28	50
1	52	.91	9.90	32.930	25.352	262.3	0.162	5.33	83.0	14.1	1.20	10.8	0.14	0.53	0.29	52
1	62	10.07	10.06	33.339	25.645	234.8	0.187	5.62	88.1	20.3	1.33	14.3	0.15	1.54	1.10	63
1	71	9.48	9.47	33.552	25.909	209.8	0.207	4.87	75.4	26.1	1.62	19.7	0.19	0.98	0.87	72
	75 ISL	9.38	9.37	33.587	25.953	205.7	0.216	4.72	73.0	26.6	1.65	20.2	0.20	0.83	0.80	76
1	86	9.20	9.19	33.617	26.005	200.9	0.238	4.45	68.5	27.9	1.73	21.6	0.22	0.53	0.62	87
	100 ISL	8.66	8.65	33.682	26.141	188.2	0.265	3.75	57.1	29.8	1.85	23.9	0.11	0.15	0.23	101
1	101	8.62	8.61	33.688	26.152	187.2	0.267	3.70	56.3	29.9	1.86	24.1	0.10	0.13	0.21	102
1	120	8.23	8.22	33.827	26.320	171.5	0.301	3.35	50.5	33.3	1.98	26.1	0.05	0.07	0.23	121
	125 ISL	8.15	8.14	33.858	26.357	168.1	0.310	3.28	49.4	34.2	2.00	26.6	0.04	0.06	0.21	126
1	144	7.92	7.91	33.953	26.466	158.0	0.341	3.02	45.3	37.7	2.08	28.2	0.02	0.03	0.15	145
	150 ISL	7.87	7.86	33.974	26.490	155.9	0.350	2.92	43.7	38.9	2.10	28.7	0.02			151
1	174	7.70	7.68	34.026	26.555	150.0	0.387	2.58	38.5	43.0	2.19	30.3	0.04			175
	200 ISL	7.56	7.54	34.042	26.588	147.3	0.425	2.43	36.1	45.6	2.25	31.2	0.03			202
1	203	7.55	7.53	34.042	26.590	147.2	0.430	2.42	36.0	45.8	2.26	31.3	0.03			205
1	234	7.40	7.38	34.055	26.622	144.6	0.475	2.21	32.7	48.1	2.32	32.4	0.02			236
	250 ISL	7.32	7.30	34.058	26.636	143.5	0.498	2.15	31.8	49.3	2.35	32.9	0.02			252
1	274	7.19	7.16	34.061	26.656	141.9	0.532	2.08	30.7	51.3	2.39	33.5	0.01			276
	300 ISL	7.04	7.01	34.066	26.681	139.8	0.569	1.96	28.8	53.5	2.44	34.3	0.01			303
1	329	6.86	6.83	34.073	26.712	137.3	0.609	1.81	26.5	56.2	2.51	35.3	0.01			332
1	388	6.45	6.42	34.088	26.779	131.5	0.688	1.50	21.7	62.8	2.65	37.6	0.01			391
	400 ISL	6.30	6.26	34.091	26.801	129.5	0.704	1.41	20.4	65.1	2.69	38.3	0.01			404
1	455	5.66	5.62	34.120	26.904	119.8	0.773	0.96	13.6	76.1	2.90	41.4	0.00			459
	500 ISL	5.47	5.43	34.174	26.970	114.0	0.825	0.70	9.9	82.3	3.00	42.5	0.00			505
1	527	5.36	5.32	34.206	27.009	110.5	0.856	0.55	7.8	86.1	3.06	43.2	0.00			532

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 60

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 43.1 N	123 50.2 W	03/05/87	1106 GMT	406 M	340	22 KT		1	1021.2 MB	12.0 C	11.4 C	6/8	CC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	6	11.06	11.06	33.154	25.328	263.7		6.45	103.2	14.0	0.95	8.2	0.13	2.82	0.77	6

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 62

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 34.2 N	123 38.9 W	03/05/87	1322 GMT	175 M	330	22 KT	330 06 10	2	1020.5 MB	11.8 C	11.8 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	11.05	11.05	32.975	25.190	276.6	0.000	6.61	105.7	9.4	0.72	7.3	0.09	4.58	1.24	0
1	2	11.05	11.05	32.975	25.190	276.7	0.006	6.61	105.7	9.4	0.72	7.3	0.09	4.58	1.24	2
	10 ISL	11.03	11.03	32.977	25.196	276.3	0.028	6.60	105.4	9.5	0.74	7.4	0.09	4.57	1.49	10
1	13	11.02	11.02	32.978	25.198	276.2	0.036	6.59	105.3	9.6	0.75	7.5	0.09	4.56	1.53	13
	20 ISL	10.30	10.30	33.264	25.547	243.2	0.054	5.81	91.5	18.0	1.19	13.6	0.15	2.03	0.99	20
1	23	9.98	9.98	33.392	25.700	228.6	0.061	5.46	85.5	21.7	1.39	16.3	0.17	0.94	0.73	23
	30 ISL	9.76	9.76	33.464	25.793	219.9	0.077	5.18	80.7	23.2	1.48	17.4	0.18	0.75	0.53	30
1	33	9.73	9.73	33.470	25.803	219.1	0.083	5.12	79.7	23.8	1.52	17.9	0.18	0.67	0.51	33
1	44	9.45	9.45	33.572	25.929	207.3	0.107	4.78	74.0	26.0	1.65	20.2	0.15	0.28	0.58	44
	50 ISL	9.17	9.16	33.579	25.980	202.6	0.119	4.19	64.5	25.0	1.69	21.3	0.08	0.11	0.33	50
1	54	8.98	8.97	33.582	26.012	199.6	0.127	3.82	58.5	24.5	1.72	21.9	0.03	0.03	0.16	54
1	64	8.75	8.74	33.647	26.099	191.5	0.147	3.70	56.4	27.3	1.79	23.2	0.03	0.03	0.12	65
1	75	8.49	8.48	33.716	26.193	182.7	0.167	3.52	53.4	31.5	1.89	24.9	0.04	0.07	0.15	76
1	89	8.23	8.22	33.776	26.280	174.7	0.192	3.43	51.7	31.7	1.90	25.3	0.04	0.04	0.23	90
	100 ISL	8.18	8.17	33.854	26.349	168.4	0.211	3.29	49.6	33.1	1.95	26.1	0.03	0.03	0.22	101
1	110	8.14	8.13	33.916	26.404	163.4	0.228	3.11	46.8	34.9	2.01	26.9	0.02	0.03	0.20	111
	125 ISL	8.09	8.08	33.983	26.464	157.9	0.252	2.74	41.2	38.2	2.13	28.2	0.04	0.03	0.25	126
1	137	8.06	8.05	34.016	26.494	155.2	0.271	2.48	37.3	40.5	2.21	29.1	0.07	0.04	0.30	138
	150 ISL	8.05	8.03	34.019	26.498	155.1	0.291	2.43	36.5	40.9	2.23	29.3	0.08	0.05	0.32	151
1	161	8.04	8.02	34.022	26.502	154.9	0.308	2.39	35.9	41.3	2.25	29.5	0.09	0.05	0.34	162

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 64

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 24.8 N	123 33.2 W	03/05/87	1525 GMT	171 M	330	20 KT		1	1021.2 MB	12.2 C	11.1 C	4/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	7	11.55	11.55	32.530	24.755	318.3		6.57	105.9	4.2	0.55	0.4	0.09	0.54	0.28	7

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 69

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 17.1 N	123 40.2 W	03/05/87	2138 GMT	1448 M	320	32 KT	320 10 06	1	1019.7 MB	13.5 C	13.0 C	7/8	ST

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	12.30	12.30	32.515	24.604	332.5	0.000	6.44	105.5	2.1	0.42	0.1	0.00	0.24	0.11	0
1	1		12.30	12.30	32.515	24.604	332.5	0.003	6.44	105.5	2.1	0.42	0.1	0.00	0.24	0.11	1
	10	ISL	12.27	12.27	32.515	24.610	332.2	0.033	6.47	105.9	2.3	0.42	0.0	0.00	0.24	0.13	10
1	11		12.27	12.27	32.515	24.610	332.2	0.037	6.47	105.9	2.3	0.42	0.0	0.00	0.24	0.13	11
	20	ISL	12.29	12.29	32.515	24.606	332.8	0.066	6.44	105.4	2.1	0.41	0.0	0.00	0.25	0.11	20
1	21		12.29	12.29	32.515	24.606	332.8	0.070	6.44	105.4	2.1	0.41	0.0	0.00	0.25	0.11	21
	30	ISL	12.27	12.27	32.515	24.610	332.6	0.100	6.45	105.5	2.2	0.42	0.0	0.00	0.24	0.13	30
1	32		12.27	12.27	32.515	24.610	332.7	0.106	6.45	105.5	2.2	0.42	0.0	0.00	0.24	0.13	32
1	42		11.76	11.75	32.700	24.849	310.1	0.139	6.43	104.2	3.9	0.52	0.2	0.24	0.67	0.34	42
	50	ISL	11.72	11.71	32.815	24.946	301.1	0.163	6.30	102.1	4.7	0.56	1.2	0.30	0.73	0.42	50
1	52		11.71	11.70	32.842	24.969	299.0	0.169	6.23	100.9	5.0	0.57	1.4	0.32	0.75	0.44	52
1	62		11.10	11.09	32.998	25.201	277.1	0.198	5.55	88.8	8.6	0.87	7.2	0.03	0.16	0.17	63
1	73		10.40	10.39	33.138	25.432	255.3	0.227	5.05	79.6	13.0	1.16	12.4	0.02	0.08	0.12	74
	75	ISL	10.29	10.28	33.167	25.474	251.3	0.232	4.95	77.9	13.8	1.21	13.2	0.02	0.07	0.12	76
1	88		9.66	9.65	33.341	25.715	228.6	0.263	4.41	68.5	18.2	1.45	17.4	0.02	0.03	0.10	89
	100	ISL	9.16	9.15	33.437	25.871	213.9	0.290	4.21	64.7	21.3	1.57	19.9	0.03	0.02	0.11	101
1	103		9.05	9.04	33.460	25.906	210.6	0.296	4.17	63.9	22.1	1.60	20.4	0.03	0.02	0.11	104
1	123		8.61	8.60	33.716	26.176	185.3	0.336	3.55	54.0	30.5	1.85	25.0	0.02	0.02	0.11	124
	125	ISL	8.58	8.57	33.730	26.191	183.8	0.340	3.51	53.3	31.0	1.87	25.2	0.02	0.02	0.11	126
1	149		8.29	8.27	33.828	26.312	172.8	0.382	3.14	47.4	35.0	2.00	27.1	0.02	0.02	0.11	150
	150	ISL	8.27	8.25	33.831	26.318	172.3	0.384	3.13	47.2	35.2	2.00	27.2	0.02			151
1	180		7.79	7.77	33.922	26.461	159.1	0.434	2.96	44.2	40.9	2.10	29.0	0.02			182
	200	ISL	7.59	7.57	33.975	26.531	152.7	0.465	2.81	41.8	42.3	2.18	30.1	0.01			202
1	211		7.50	7.48	33.997	26.562	150.0	0.482	2.73	40.5	43.0	2.22	30.6	0.01			213
1	241		7.27	7.25	34.007	26.603	146.5	0.526	2.55	37.6	47.8	2.28	31.6	0.01			243
	250	ISL	7.18	7.16	34.008	26.616	145.3	0.539	2.50	36.8	49.1	2.30	32.0	0.01			252
1	281		6.89	6.86	34.016	26.662	141.3	0.584	2.29	33.5	53.4	2.41	33.5	0.01			283
	300	ISL	6.74	6.71	34.036	26.698	138.0	0.610	2.04	29.7	56.7	2.50	34.8	0.01			303
1	338		6.48	6.45	34.081	26.769	131.8	0.661	1.52	22.0	63.3	2.69	37.4	0.01			341
1	399		6.08	6.05	34.122	26.853	124.3	0.740	1.05	15.1	71.9	2.89	39.7	0.01			403
	400	ISL	6.07	6.04	34.123	26.855	124.2	0.741	1.04	14.9	72.1	2.89	39.7	0.01			404
1	466		5.46	5.42	34.161	26.961	114.5	0.820	0.68	9.6	83.3	3.07	42.2	0.01			470
	500	ISL	5.18	5.14	34.163	26.996	111.2	0.858	0.61	8.6	88.3	3.13	43.1	0.01			505
1	540		4.85	4.81	34.168	27.038	107.3	0.902	0.52	7.3	94.1	3.19	44.2	0.00			545

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 71

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 26.2 N	123 47.0 W	04/05/87	0018 GMT	1533 M	340	25 KT		1	1018.2 MB	13.0 C	11.8 C	2/8	CU

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	11	11.64	11.64	32.523	24.733	320.4		6.67	107.7	3.6	0.50	0.1	0.07	0.81	0.28	11

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 73

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 35.3 N	123 54.0 W	04/05/87	0225 GMT	1636 M	330	22 KT	330 09 07	0	1020.1 MB	12.6 C	12.1 C	0/8	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	12	11.25	11.25	33.307	25.413	255.8		6.73	108.3	16.8	0.96	8.7	0.14	3.57	1.19	12

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 75

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
38 44.3 N	124 2.5 W	04/05/87	0444 GMT		340	20 KT			1020.8 MB	13.0 C	12.1 C	

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	11.11	11.11	33.190	25.347	261.7	0.000	6.62	106.1	14.9	0.90	7.2	0.23	4.28	1.38	0
1	2		11.11	11.11	33.190	25.347	261.8	0.005	6.62	106.1	14.9	0.90	7.2	0.23	4.28	1.38	2
	10	ISL	11.12	11.12	33.192	25.347	262.0	0.026	6.64	106.4	15.1	0.91	7.2	0.15	4.47	1.44	10
1	12		11.12	11.12	33.193	25.348	262.0	0.031	6.64	106.4	15.1	0.91	7.2	0.13	4.56	1.46	12
	20	ISL	11.12	11.12	33.224	25.372	259.8	0.052	6.65	106.6	15.1	0.93	7.4	0.13	5.08	1.52	20
1	22		11.12	11.12	33.232	25.378	259.3	0.057	6.65	106.6	15.1	0.94	7.4	0.13	5.21	1.53	22
	30	ISL	10.16	10.16	33.455	25.719	227.0	0.077	5.59	87.9	23.4	1.41	15.9	0.17	2.53	1.22	30
1	32		9.89	9.89	33.516	25.812	218.2	0.081	5.28	82.5	25.7	1.54	18.2	0.18	1.78	1.11	32
1	41		9.28	9.28	33.635	26.006	200.0	0.100	4.55	70.2	29.4	1.73	22.0	0.26	0.87	0.59	41
	50	ISL	9.02	9.01	33.709	26.105	190.7	0.118	4.21	64.6	30.9	1.85	24.0	0.27	0.82	0.66	50
1	51		9.00	8.99	33.714	26.112	190.0	0.120	4.18	64.1	31.0	1.86	24.1	0.27	0.82	0.67	51
1	60		8.85	8.84	33.743	26.159	185.8	0.137	3.83	58.6	31.2	1.93	25.0	0.23	0.36	0.38	60
1	69		8.77	8.76	33.769	26.192	182.8	0.153	3.68	56.2	31.6	1.93	25.3	0.18	0.33	0.31	70
	75	ISL	8.73	8.72	33.777	26.204	181.7	0.164	3.65	55.7	31.9	1.94	25.6	0.15	0.31	0.31	76
1	83		8.66	8.65	33.785	26.221	180.3	0.179	3.62	55.1	32.4	1.97	26.0	0.12	0.29	0.30	84
1	97		8.49	8.48	33.815	26.271	175.7	0.204	3.38	51.3	33.9	2.00	26.8	0.05	0.31	0.33	98
	100	ISL	8.47	8.46	33.821	26.279	175.0	0.209	3.34	50.6	34.0	2.00	26.9	0.05	0.29	0.32	101
1	116		8.31	8.30	33.858	26.333	170.3	0.236	3.17	47.9	35.0	2.03	27.5	0.03	0.19	0.28	117
	125	ISL	8.11	8.10	33.884	26.383	165.6	0.252	3.11	46.8	36.7	2.06	28.1	0.03	0.17	0.29	126
1	140		7.76	7.75	33.929	26.470	157.5	0.276	2.98	44.5	40.3	2.12	29.5	0.02	0.13	0.30	141
	150	ISL	7.61	7.60	33.958	26.515	153.4	0.291	2.80	41.7	42.9	2.19	30.6	0.02			151
1	165		7.44	7.42	33.992	26.566	148.7	0.314	2.56	37.9	46.3	2.28	32.1	0.01			166
1	195		7.09	7.07	33.999	26.620	143.9	0.358	2.60	38.2	48.4	2.31	32.9	0.01			197
	200	ISL	7.04	7.02	34.002	26.630	143.1	0.365	2.56	37.6	49.1	2.32	33.2	0.01			202
1	223		6.85	6.83	34.019	26.669	139.6	0.398	2.33	34.1	52.7	2.40	34.5	0.00			225
	250	ISL	6.66	6.64	34.028	26.702	136.9	0.435	2.12	30.9	56.1	2.50	35.9	0.00			252
1	262		6.57	6.55	34.030	26.716	135.7	0.451	2.03	29.5	57.6	2.54	36.5	0.00			264
	300	ISL	6.20	6.17	34.044	26.775	130.4	0.502	1.71	24.6	63.7	2.67	38.8	0.00			303
1	315		6.05	6.02	34.048	26.798	128.4	0.521	1.59	22.8	66.1	2.72	39.7	0.00			318
1	374		5.60	5.57	34.050	26.855	123.3	0.595	1.32	18.7	73.2	2.86	41.9	0.00			377
	400	ISL	5.58	5.55	34.086	26.886	120.7	0.627	1.10	15.6	75.8	2.94	42.7	0.00			404
1	441		5.56	5.52	34.141	26.933	116.9	0.676	0.77	10.9	79.7	3.05	43.9	0.00			445
	500	ISL	5.30	5.26	34.170	26.987	112.2	0.743	0.59	8.3	85.6	3.13	45.1	0.00			505
1	511		5.25	5.21	34.176	26.998	111.2	0.756	0.56	7.9	86.7	3.14	45.3	0.00			516

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 77

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
38 52.8 N	124 7.6 W	04/05/87	0728 GMT	1522 M	330	24 KT			1019.7 MB	10.6 C	10.3 C	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	7	11.50	11.50	32.536	24.768	317.0		6.71	108.0	3.4	0.52	0.2	0.06			7

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 79

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
39 2.3 N	124 14.1 W	04/05/87	0929 GMT	1789 M	330	25 KT			1019.8 MB	12.1 C	11.0 C	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	8	12.15	12.15	32.503	24.623	330.8		6.50	106.1	2.9	0.44	0.1	0.00			8

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 81

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
39 11.0 N	124 20.4 W	04/05/87	1149 GMT	2083 M	330	25 KT	330 06 06		1019.2 MB	12.0 C	11.6 C	

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	12.33	12.33	32.519	24.601	332.7	0.000	6.43	105.4	2.3	0.41	0.1	0.00	0.21	0.09	0
1	1		12.33	12.33	32.519	24.601	332.8	0.003	6.43	105.4	2.3	0.41	0.1	0.00	0.21	0.09	1
	10	ISL	12.35	12.35	32.522	24.600	333.1	0.033	6.41	105.1	2.0	0.45	0.1	0.00	0.22	0.11	10
1	11		12.35	12.35	32.523	24.601	333.1	0.037	6.41	105.1	2.0	0.46	0.1	0.00	0.22	0.11	11
	20	ISL	12.35	12.35	32.530	24.606	332.7	0.067	6.41	105.1	2.0	0.42	0.1	0.00	0.22	0.10	20
1	22		12.35	12.35	32.532	24.608	332.6	0.073	6.41	105.1	2.0	0.41	0.1	0.00	0.22	0.10	22
	30	ISL	12.41	12.41	32.558	24.617	332.0	0.100	6.41	105.2	2.3	0.42	0.1	0.01	0.24	0.09	30
1	32		12.42	12.42	32.566	24.621	331.6	0.106	6.41	105.3	2.4	0.43	0.1	0.01	0.25	0.09	32
1	43		12.34	12.33	32.621	24.679	326.3	0.143	6.40	104.9	2.6	0.43	0.1	0.02	0.34	0.14	43
	50	ISL	11.78	11.77	32.638	24.797	315.2	0.165	6.39	103.5	3.8	0.50	0.9	0.22	0.61	0.28	50
1	53		11.52	11.51	32.643	24.849	310.3	0.174	6.39	103.0	4.4	0.54	1.3	0.30	0.71	0.34	53
1	64		11.11	11.10	32.652	24.930	302.9	0.208	6.25	99.8	6.0	0.65	3.2	0.27	0.63	0.31	65
1	74		11.02	11.01	32.746	25.019	294.6	0.238	5.99	95.5	7.3	0.75	4.9	0.12	0.39	0.20	75
	75	ISL	10.97	10.96	32.761	25.040	292.7	0.241	5.93	94.5	7.7	0.78	5.4	0.11	0.36	0.19	76
1	89		10.08	10.07				0.280	4.99	78.1	14.5	1.19	13.5	0.03	0.07	0.10	90
	100	ISL	9.58	9.57	33.191	25.611	238.7	0.307	4.68	72.5	18.3	1.38	16.7	0.02	0.06	0.09	101
1	105		9.40	9.39	33.288	25.716	228.8	0.319	4.59	70.9	19.8	1.45	17.7	0.02	0.05	0.09	106
	125	ISL	8.99	8.98	33.562	25.996	202.5	0.362	3.91	59.9	25.2	1.68	22.0	0.02	0.03	0.08	126
1	126		8.97	8.96	33.574	26.009	201.3	0.364	3.88	59.4	25.4	1.69	22.2	0.02	0.03	0.08	127
	150	ISL	8.41	8.39	33.757	26.239	179.8	0.410	3.52	53.3	31.0	1.86	25.0	0.01	0.03	0.08	151
1	151		8.39	8.37	33.762	26.246	179.1	0.412	3.51	53.1	31.2	1.86	25.1	0.01	0.03	0.08	152
1	182		7.75	7.73	33.861	26.419	163.1	0.465	3.52	52.5	34.9	1.90	26.4	0.01			184
	200	ISL	7.65	7.63	33.923	26.482	157.4	0.494	3.29	49.0	37.9	1.99	27.7	0.01			202
1	213		7.59	7.57	33.960	26.520	154.0	0.514	3.09	45.9	40.2	2.06	28.7	0.01			215
1	244		7.14	7.12	33.981	26.600	146.7	0.560	2.84	41.8	45.3	2.16	30.4	0.01			246
	250	ISL	7.07	7.05	33.983	26.611	145.7	0.569	2.79	41.0	46.3	2.19	30.7	0.01			252
1	285		6.73	6.70	33.996	26.668	140.7	0.619	2.44	35.6	52.1	2.35	32.7	0.01			287
	300	ISL	6.63	6.60	34.009	26.692	138.6	0.640	2.25	32.7	54.8	2.42	33.6	0.01			303
1	341		6.37	6.34	34.050	26.759	132.7	0.696	1.74	25.2	62.1	2.60	36.1	0.01			344
	400	ISL	5.87	5.84	34.085	26.850	124.4	0.772	1.21	17.3	70.4	2.83	39.1	0.01			404
1	403		5.84	5.81	34.086	26.855	124.0	0.775	1.19	17.0	70.8	2.84	39.2	0.01			407
1	471		5.43	5.39	34.121	26.933	117.1	0.857	0.91	12.9	79.9	2.98	41.1	0.00			475
	500	ISL	5.32	5.28	34.143	26.963	114.4	0.891	0.79	11.1	83.2	3.03	41.6	0.00			505
1	543		5.15	5.11	34.175	27.009	110.5	0.939	0.62	8.7	88.2	3.10	42.3	0.00			548

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 83

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
39 19.5 N	124 26.4 W	04/05/87	1449 GMT	2716 M	340	29 KT		1	1020.8 MB	10.6 C	10.3 C	1/8	CC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	6	11.70	11.70	32.473	24.683	325.1		6.59	106.5	2.8	0.45	0.1	0.01	0.53	0.19	6

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 85

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
39 28.0 N	124 32.2 W	04/05/87	1704 GMT	2550 M	340	28 KT		1	1020.6 MB	10.6 C	10.3 C	2/8	CI

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	5	11.10	11.10	33.151	25.319	264.6		6.92	110.8	9.4	0.77	5.1	0.10	6.63	1.13	5

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 87

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
39 37.8 N	124 39.7 W	04/05/87	2009 GMT		340	30 KT	340 08 07	1	1020.0 MB	14.9 C	12.6 C	2/8	AS

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	10.97	10.97	33.201	25.380	258.6	0.000	6.68	106.7	13.5	0.88	6.9	0.14			0
1	1	10.97	10.97	33.201	25.381	258.6	0.003	6.68	106.7	13.5	0.88	6.9	0.14			1
	10 ISL	10.94	10.94	33.202	25.387	258.2	0.026	6.69	106.8	13.6	0.83	7.2	0.14			10
1	11	10.94	10.94	33.202	25.387	258.2	0.028	6.69	106.8	13.6	0.82	7.2	0.14	4.37	1.26	11
	20 ISL	10.91	10.91	33.215	25.402	256.9	0.052	6.59	105.2	15.1	0.90	8.5	0.15	3.69	1.21	20
1	23	10.89	10.89	33.224	25.413	256.0	0.059	6.54	104.3	15.8	0.94	9.0	0.15	3.46	1.19	23
	30 ISL	10.78	10.78	33.260	25.460	251.6	0.077	6.45	102.7	17.4	1.03	10.0	0.16	3.26	1.27	30
1	33	10.73	10.73	33.275	25.481	249.7	0.085	6.41	101.9	18.5	1.09	10.9	0.16	3.08	1.29	33
1	44	9.28	9.28	33.506	25.905	209.6	0.110	4.88	75.2	27.8	1.64	20.5	0.31	0.88	0.91	44
	50 ISL	8.76	8.75	33.621	26.077	193.3	0.122	4.12	62.8	31.5	1.83	23.6	0.27	0.37	0.45	50
1	53	8.58	8.57	33.668	26.142	187.2	0.128	3.82	58.0	32.9	1.89	24.7	0.24	0.24	0.24	53
1	64	8.37	8.36	33.725	26.219	180.1	0.148	3.59	54.3	34.6	1.97	26.0	0.14	0.17	0.21	65
1	73	8.25	8.24	33.781	26.281	174.4	0.164	3.39	51.1	35.5	2.00	26.8	0.11	0.12	0.19	74
	75 ISL	8.22	8.21	33.794	26.295	173.0	0.167	3.35	50.5	35.8	2.01	27.0	0.10	0.11	0.19	76
1	89	7.96	7.95	33.871	26.395	163.8	0.191	3.12	46.8	37.9	2.07	28.1	0.06	0.05	0.17	90
	100 ISL	7.78	7.77	33.904	26.447	159.0	0.209	3.10	46.3	39.6	2.09	28.6	0.10	0.05	0.24	101
1	104	7.72	7.71	33.913	26.463	157.6	0.215	3.09	46.1	40.2	2.10	28.7	0.12	0.05	0.26	105
1	125	7.62	7.61	33.962	26.516	152.8	0.248	2.78	41.4	42.7	2.19	30.2	0.06	0.03	0.14	126
1	150	7.32	7.31	33.993	26.583	146.8	0.285	2.71	40.1	46.0	2.24	31.1	0.05	0.02	0.15	151
1	181	7.04	7.02	34.016	26.641	141.8	0.330	2.40	35.2	50.4	2.36	32.9	0.03			183
	200 ISL	6.86	6.84	34.028	26.675	138.8	0.356	2.22	32.5	53.3	2.44	34.0	0.02			202
1	211	6.75	6.73	34.033	26.694	137.1	0.372	2.12	30.9	54.9	2.48	34.6	0.02			213
1	241	6.43	6.41	34.034	26.737	133.3	0.412	1.95	28.2	58.9	2.57	36.3	0.02			243
	250 ISL	6.35	6.33	34.037	26.750	132.1	0.424	1.87	27.0	60.3	2.60	36.8	0.02			252
1	282	6.12	6.10	34.053	26.792	128.4	0.466	1.60	23.0	65.5	2.72	38.4	0.02			284
	300 ISL	6.00	5.97	34.061	26.814	126.6	0.489	1.49	21.4	68.0	2.77	39.2	0.02			303
1	339	5.75	5.72	34.081	26.861	122.5	0.537	1.28	18.2	73.0	2.88	40.6	0.01			342
1	400	5.36	5.33	34.119	26.939	115.6	0.610	0.93	13.1	81.1	3.03	42.6	0.00			404
1	468	4.96	4.92	34.162	27.020	108.3	0.686	0.61	8.5	90.9	3.13	44.7	0.00			472
	500 ISL	4.88	4.84	34.193	27.053	105.4	0.720	0.51	7.1	94.1	3.18	45.1	0.00			505
1	540	4.78	4.74	34.233	27.097	101.7	0.762	0.39	5.4	98.1	3.25	45.6	0.00			545

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 89

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
39 46.6 N	124 46.2 W	04/05/87	2251 GMT	2961 M	340	31 KT		1	1019.2 MB	11.1 C	10.6 C	2/8	CI

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	13	11.04	11.04	33.195	25.364	260.5		6.48	103.7	17.4	0.98	9.0	0.15			13

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 91

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
39 55.4 N	124 52.5 W	05/05/87	0044 GMT		340	30 KT		1	1018.7 MB	12.6 C	11.3 C	1/8	CC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	14	11.10	11.10	33.148	25.316	265.0		6.58	105.4	11.6	0.81	5.9	0.14	2.73	0.82	14

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 9[illegible]

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
39 54.9 N	125 8.8 W	05/05/87	0337 GMT	3572 M	360	25 KT			1021.0 MB	11.3 C	11.1 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	13	11.55	11.55	33.123	25.216	274.6		7.17	116.0	8.9	0.57	3.4	0.13	8.87	1.13	13

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 95

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
39 45.6 N	125 1.1 W	05/05/87	0546 GMT	2078 M	340	22 KT	330 07 05		1020.0 MB	12.7 C	12.2 C	

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	11.33	11.33	33.240	25.346	261.8	0.000	6.87	110.7	14.9	0.83	7.1	0.16	5.56	1.47	0
1	2		11.33	11.33	33.240	25.346	261.9	0.005	6.87	110.7	14.9	0.83	7.1	0.16	5.56	1.47	2
	10	ISL	11.33	11.33	33.243	25.349	261.8	0.026	6.90	111.1	14.9	0.86	7.2	0.14	5.46	1.63	10
1	12		11.33	11.33	33.244	25.350	261.8	0.031	6.90	111.1	14.9	0.87	7.2	0.14	5.44	1.66	12
	20	ISL	11.22	11.22	33.304	25.417	255.6	0.052	6.83	109.8	17.0	0.96	8.9	0.16	4.73	1.43	20
1	22		11.19	11.19	33.319	25.433	254.0	0.057	6.81	109.4	17.5	0.98	9.4	0.17	4.54	1.37	22
	30	ISL	11.13	11.13	33.331	25.454	252.3	0.077	6.73	108.0	17.9	1.01	9.9	0.18	4.34	1.51	30
1	33		11.09	11.09	33.330	25.460	251.8	0.085	6.68	107.1	17.9	1.03	10.0	0.18	4.30	1.59	33
1	43		10.66	10.65	33.337	25.542	244.2	0.110	6.36	101.0	19.3	1.19	11.2	0.17	3.83	1.64	43
	50	ISL	10.06	10.05	33.370	25.670	232.1	0.126	5.72	89.7	22.1	1.40	14.5	0.18	2.36	1.08	50
1	53		9.79	9.78	33.390	25.731	226.3	0.133	5.41	84.3	23.4	1.49	16.0	0.19	1.69	0.81	53
1	63		9.20	9.19	33.461	25.883	212.1	0.155	4.70	72.3	25.6	1.63	19.2	0.17	0.72	0.43	64
1	73		9.00	8.99	33.520	25.961	204.9	0.176	4.60	70.5	26.7	1.69	20.3	0.18	0.40	0.38	74
	75	ISL	8.93	8.92	33.533	25.982	202.9	0.180	4.54	69.4	26.8	1.70	20.6	0.17	0.36	0.36	76
1	88		8.49	8.48	33.606	26.107	191.1	0.206	4.05	61.4	27.3	1.78	22.6	0.10	0.22	0.24	89
	100	ISL	8.28	8.27	33.616	26.147	187.5	0.229	3.57	53.8	33.4	1.94	25.3	0.10	0.16	0.31	101
1	103		8.25	8.24	33.622	26.156	186.7	0.234	3.46	52.1	34.8	1.98	25.9	0.10	0.16	0.33	104
1	123		8.07	8.06	33.850	26.362	167.5	0.270	3.23	48.5	38.6	2.09	27.8	0.11	0.23	0.30	124
	125	ISL	8.05	8.04	33.859	26.372	166.6	0.273	3.21	48.2	38.8	2.09	27.9	0.11	0.23	0.29	126
1	149		7.80	7.79	33.902	26.443	160.2	0.312	2.95	44.1	40.7	2.14	28.8	0.04	0.17	0.21	150
	150	ISL	7.79	7.78	33.904	26.446	159.9	0.314	2.94	43.9	40.8	2.14	28.9	0.04			151
1	179		7.45	7.43	33.962	26.541	151.3	0.359	2.73	40.5	45.1	2.26	30.5	0.03			181
	200	ISL	7.29	7.27	33.981	26.579	148.1	0.390	2.63	38.8	47.0	2.30	31.3	0.02			202
1	209		7.21	7.19	33.986	26.594	146.7	0.404	2.59	38.2	47.9	2.32	31.6	0.02			211
1	239		6.70	6.68	34.002	26.676	139.2	0.446	2.41	35.1	53.2	2.41	33.6	0.01			241
	250	ISL	6.60	6.58	34.012	26.698	137.3	0.462	2.28	33.1	55.1	2.47	34.2	0.01			252
1	280		6.42	6.40	34.039	26.743	133.3	0.502	1.90	27.5	60.2	2.63	35.6	0.01			282
	300	ISL	6.26	6.23	34.052	26.774	130.5	0.529	1.71	24.7	63.4	2.71	36.8	0.01			303
1	336		5.96	5.93	34.074	26.830	125.6	0.575	1.42	20.3	69.2	2.83	38.9	0.01			339
1	397		5.47	5.44	34.112	26.920	117.4	0.649	0.97	13.7	79.3	3.02	41.9	0.00			401
	400	ISL	5.45	5.42	34.114	26.924	117.0	0.652	0.95	13.4	79.7	3.03	42.0	0.00			404
1	464		5.18	5.14	34.164	26.996	110.8	0.725	0.65	9.1	87.2	3.15	43.8	0.00			468
	500	ISL	5.05	5.01	34.192	27.033	107.5	0.765	0.54	7.6	91.1	3.19	44.4	0.00			505
1	537		4.92	4.88	34.221	27.072	104.2	0.804	0.42	5.9	95.2	3.24	45.1	0.00			542

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 97

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
39 37.0 N	124 53.7 W	05/05/87	0817 GMT	2535 M	340	25 KT	340 06 06		1019.2 MB	13.0 C	11.8 C	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	9	11.12	11.12	33.334	25.458	251.4		6.78	108.8	16.0	0.94	8.9	0.16	5.38	1.36	9

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 99

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
39 28.1 N	124 47.1 W	05/05/87	0951 GMT	2802 M	340	30 KT	340 06 08		1018.2 MB	12.8 C	11.9 C	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	8	11.12	11.12	32.545	24.844	309.8		6.47	103.3	3.9	0.61	1.2	0.21	0.81	0.26	8

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 101

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
39 19.4 N	124 40.6 W	05/05/87	1146 GMT	3017 M	340	32 KT	340 06 08		1017.0 MB	12.5 C	12.0 C	

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	12.06	12.06	32.552	24.677	325.5	0.000	6.49	105.8	1.9	0.41	0.0	0.00	0.43	0.14	0
1	1		12.06	12.06	32.552	24.678	325.5	0.003	6.49	105.8	1.9	0.41	0.0	0.00	0.43	0.14	1
	10	ISL	12.08	12.08	32.552	24.674	326.0	0.033	6.51	106.1	1.9	0.43	0.0	0.00	0.42	0.14	10
1	12		12.08	12.08	32.552	24.674	326.1	0.039	6.51	106.1	1.9	0.43	0.0	0.00	0.42	0.14	12
	20	ISL	11.99	11.99	32.540	24.682	325.5	0.065	6.52	106.1	1.9	0.43	0.0	0.00	0.46	0.15	20
1	22		11.97	11.97	32.536	24.683	325.5	0.072	6.52	106.0	1.9	0.43	0.0	0.00	0.47	0.16	22
	30	ISL	11.92	11.92	32.524	24.683	325.7	0.098	6.53	106.1	1.9	0.44	0.0	0.01	0.49	0.19	30
1	33		11.92	11.92	32.523	24.682	325.9	0.107	6.53	106.1	1.9	0.44	0.0	0.01	0.50	0.20	33
1	43		11.97	11.96	32.565	24.706	323.9	0.140	6.51	105.9	2.2	0.43	0.0	0.01	0.60	0.19	43
	50	ISL	11.67	11.66	32.639	24.819	313.2	0.162	6.44	104.1	3.3	0.50	0.7	0.05	0.74	0.19	50
1	54		11.48	11.47	32.687	24.890	306.5	0.175	6.37	102.6	3.9	0.55	1.2	0.10	0.77	0.19	54
1	64		11.33	11.32	32.777	24.988	297.4	0.205	6.08	97.6	4.5	0.60	2.4	0.30	0.37	0.24	65
1	74		10.82	10.81	32.874	25.154	281.8	0.234	5.71	90.7	7.1	0.81	6.5	0.03	0.18	0.13	75
	75	ISL	10.72	10.71	32.895	25.188	278.6	0.237	5.65	89.6	7.7	0.85	7.1	0.03	0.17	0.13	76
1	90		9.38	9.37	33.260	25.697	239.3	0.275	4.75	73.3	17.0	1.37	16.5	0.01	0.06	0.11	91
	100	ISL	9.32	9.31	33.446	25.853	215.7	0.297	4.23	65.2	20.7	1.56	19.7	0.01	0.03	0.11	101
1	105		9.29	9.28	33.502	25.901	211.2	0.308	4.00	61.7	22.1	1.62	20.8	0.01	0.03	0.11	106
	125	ISL	9.05	9.04	33.700	26.094	193.2	0.348	3.43	52.7	26.4	1.81	23.7	0.01	0.02	0.11	126
1	126		9.04	9.03	33.707	26.102	192.5	0.350	3.41	52.3	26.6	1.82	23.8	0.01	0.02	0.11	127
	150	ISL	8.66	8.64	33.848	26.272	176.7	0.394	3.16	48.1	30.6	1.95	26.0	0.01	0.01	0.10	151
1	152		8.63	8.61	33.856	26.283	175.7	0.398	3.15	47.9	30.9	1.96	26.1	0.01	0.01	0.10	153
1	182		8.12	8.10	33.930	26.419	163.3	0.449	3.22	48.5	34.4	1.98	26.8	0.01			184
	200	ISL	7.97	7.95	33.960	26.465	159.2	0.478	3.18	47.7	36.0	2.00	27.0	0.01			202
1	214		7.86	7.84	33.978	26.495	156.5	0.500	3.15	47.1	37.6	2.03	27.4	0.01			216
1	243		7.47	7.45	34.006	26.573	149.3	0.544	2.81	41.7	43.1	2.17	29.5	0.01			245
	250	ISL	7.38	7.36	34.007	26.587	148.1	0.555	2.74	40.6	44.2	2.20	30.0	0.01			252
1	284		6.96	6.93	34.005	26.644	143.0	0.604	2.43	35.6	49.6	2.36	32.2	0.01			286
	300	ISL	6.77	6.74	34.011	26.675	140.3	0.627	2.25	32.8	52.6	2.44	33.3	0.01			303
1	340		6.35	6.32	34.033	26.748	133.6	0.682	1.81	26.1	60.1	2.62	35.7	0.01			343
	400	ISL	5.91	5.88	34.060	26.825	126.8	0.760	1.37	19.6	68.4	2.82	38.3	0.01			404
1	406		5.87	5.84	34.062	26.832	126.2	0.767	1.34	19.1	69.2	2.84	38.5	0.01			410
1	469		5.36	5.32	34.084	26.912	119.0	0.845	1.05	14.8	78.9	2.98	40.0	0.00			473
	500	ISL	5.23	5.19	34.107	26.945	116.0	0.881	0.89	12.5	82.9	3.04	40.8	0.00			505
1	543		5.04	5.00	34.139	26.993	111.8	0.930	0.68	9.5	88.5	3.13	41.8	0.00			548

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 103

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
39 10.4 N	124 35.1 W	05/05/87	1407 GMT	3279 M	340	25 KT	340 07 07	0	1016.2 MB	13.5 C	13.0 C	0/8

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	7	12.68	12.68	32.630	24.620	331.1		6.32	104.4	2.6	0.48	0.1	0.00	0.23	0.09	7

RV New Horizon SQ87 LEG I STATION G 105

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
39 2.0 N	124 28.1 W	05/05/87	1552 GMT	3354 M	340	25 KT	340 07 06	0	1015.9 MB	14.2 C	13.7 C	0/8

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	8	12.56	12.56	32.639	24.650	328.2	0.026	6.32	104.1	2.9	0.46	0.0	0.01	0.26	0.08	8

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 107

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
38 52.6 N	124 22.7 W	05/05/87	1753 GMT	3349 M	330	22 KT	330 06 06	0	1015.8 MB	14.5 C	13.8 C	0/8

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	12.47	12.47	32.592	24.631	329.9	0.000	6.35	104.4	2.8	0.43	0.0	0.01	0.24	0.10	0
1	2		12.47	12.47	32.592	24.631	329.9	0.007	6.35	104.4	2.8	0.43	0.0	0.01	0.24	0.10	2
	10	ISL	12.47	12.47	32.592	24.631	330.1	0.033	6.36	104.6	2.9	0.43	0.0	0.01	0.26	0.09	10
1	12		12.47	12.47	32.592	24.631	330.2	0.040	6.36	104.6	2.9	0.43	0.0	0.01	0.26	0.09	12
	20	ISL	12.45	12.45	32.592	24.635	330.0	0.066	6.37	104.7	2.8	0.44	0.0	0.01	0.25	0.08	20
1	23		12.45	12.45	32.592	24.635	330.0	0.076	6.37	104.7	2.7	0.44	0.0	0.01	0.25	0.08	23
	30	ISL	12.46	12.46	32.586	24.629	330.8	0.099	6.37	104.7	2.6	0.44	0.0	0.00	0.24	0.10	30
1	33		12.46	12.46	32.584	24.628	331.1	0.109	6.37	104.7	2.6	0.44	0.0	0.00	0.24	0.11	33
1	43		12.44	12.43	32.591	24.637	330.4	0.142	6.35	104.3	2.6	0.45	0.0	0.01	0.32	0.12	43
	50	ISL	12.09	12.08	32.599	24.709	323.6	0.165	6.42	104.7	3.2	0.47	0.3	0.07	0.58	0.19	50
1	53		11.88	11.87	32.606	24.754	319.5	0.175	6.44	104.6	3.6	0.48	0.4	0.13	0.68	0.23	53
1	62		11.13	11.12	32.652	24.926	303.2	0.203	6.28	100.3	5.4	0.64	2.4	0.46	0.57	0.32	63
1	72		11.28	11.27	32.807	25.020	294.5	0.232	6.04	96.9	6.5	0.69	4.0	0.19	0.31	0.23	73
	75	ISL	11.14	11.13	32.819	25.055	291.3	0.241	5.94	95.0	7.1	0.74	5.0	0.14	0.26	0.19	76
1	86		10.33	10.32	32.883	25.246	273.2	0.272	5.50	86.5	10.7	1.02	9.5	0.04	0.12	0.09	87
1	99		9.25	9.24	33.187	25.661	233.8	0.305	4.81	74.0	18.3	1.41	16.0	0.03	0.03	0.09	100
	100	ISL	9.19	9.18	33.197	25.678	232.2	0.308	4.79	73.5	18.6	1.42	16.2	0.03	0.03	0.09	101
1	118		8.61	8.60	33.342	25.883	213.0	0.348	4.53	68.7	22.3	1.58	19.0	0.02	0.03	0.09	119
	125	ISL	8.63	8.62	33.477	25.985	203.4	0.362	4.20	63.8	24.2	1.67	20.7	0.02	0.02	0.10	126
1	140		8.68	8.67	33.751	26.193	184.1	0.391	3.47	52.8	28.4	1.86	24.1	0.01	0.01	0.11	141
	150	ISL	8.50	8.48	33.830	26.282	175.7	0.409	3.37	51.1	31.0	1.93	25.5	0.01			151
1	168		8.10	8.08	33.889	26.389	165.8	0.440	3.20	48.1	34.6	2.00	26.9	0.01			169
1	194		7.82	7.80	33.940	26.471	158.4	0.482	3.25	48.6	36.5	1.99	27.3	0.01			196
	200	ISL	7.75	7.73	33.949	26.488	156.8	0.492	3.23	48.2	37.2	2.00	27.5	0.01			202
1	221		7.51	7.49	33.973	26.542	152.0	0.524	3.10	46.0	40.0	2.08	28.4	0.01			223
	250	ISL	7.14	7.12	33.992	26.609	146.0	0.567	2.85	41.9	44.7	2.19	30.3	0.02			252
1	259		7.02	7.00	33.995	26.628	144.2	0.580	2.76	40.5	46.3	2.23	31.0	0.02			261
	300	ISL	6.51	6.48	33.995	26.697	138.0	0.638	2.44	35.4	53.4	2.39	33.4	0.01			303
1	313		6.36	6.33	33.995	26.716	136.3	0.656	2.33	33.7	55.7	2.44	34.1	0.01			316
1	372		5.78	5.75	34.017	26.807	128.0	0.734	1.73	24.7	65.9	2.71	37.8	0.01			375
	400	ISL	5.65	5.62	34.043	26.844	124.8	0.769	1.45	20.6	69.2	2.81	39.1	0.01			404
1	438		5.50	5.46	34.078	26.890	120.8	0.816	1.13	16.0	73.5	2.93	40.4	0.00			442
	500	ISL	5.03	4.99	34.100	26.963	114.1	0.889	0.83	11.6	84.0	3.05	41.9	0.00			505
1	510		4.96	4.92	34.104	26.974	113.1	0.900	0.78	10.9	85.7	3.07	42.2	0.00			515

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 109

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
38 43.8 N	124 16.0 W	05/05/87	2135 GMT	1729 M	340	16 KT	350 07 08	0	1015.9 MB	14.8 C	12.9 C	0/8

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	12	11.95	11.95	32.514	24.669	326.6		6.48	105.3	3.1	0.51	0.7	0.11	0.81	0.09	12

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 111

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
38 35.1 N	124 8.8 W	05/05/87	2319 GMT	1994 M	330	13 KT			1015.2 MB	14.8 C	13.0 C	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	5	11.13	11.13	33.323	25.447	252.3		6.27	100.6	16.6	1.13	11.4	0.17	2.08	0.65	5

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 113

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
38 24.8 N	124 1.4 W	06/05/87	0112 GMT	2102 M	310	14 KT	030 05 06	0	1015.1 MB	15.3 C	13.8 C	0/8

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	11.56	11.56	32.580	24.792	314.6	0.000	6.48	104.5	4.5	0.59	1.8	0.16	0.74	0.16	0
1	2		11.56	11.56	32.580	24.792	314.7	0.006	6.48	104.5	4.5	0.59	1.8	0.16	0.74	0.16	2
	10	ISL	11.50	11.50	32.580	24.803	313.8	0.031	6.51	104.8	4.2	0.58	1.6	0.16	0.78	0.18	10
1	17		11.42	11.42	32.572	24.811	313.1	0.053	6.53	105.0	3.9	0.57	1.5	0.16	0.80	0.20	17
	20	ISL	11.39	11.39	32.581	24.823	312.0	0.063	6.52	104.7	4.0	0.58	1.6	0.19	0.77	0.21	20
	30	ISL	11.27	11.27	32.627	24.881	306.8	0.094	6.41	102.7	4.3	0.61	2.2	0.29	0.64	0.23	30
1	33		11.22	11.22	32.646	24.905	304.6	0.103	6.35	101.7	4.4	0.62	2.5	0.32	0.59	0.23	33
1	43		10.98	10.97	32.714	25.000	295.7	0.133	6.04	96.2	6.0	0.74	4.0	0.29	0.51	0.23	43
	50	ISL	10.38	10.37	32.792	25.166	280.1	0.153	5.65	88.9	10.0	0.96	7.8	0.21	0.52	0.27	50
1	53		10.15	10.14	32.861	25.258	271.3	0.161	5.53	86.6	12.2	1.06	9.6	0.18	0.53	0.29	53
1	63		10.21	10.20	33.386	25.658	233.6	0.187	5.89	92.6	19.5	1.28	14.0	0.15	1.56	0.99	64
1	73		9.97	9.96	33.431	25.734	226.6	0.210	5.56	87.0	21.1	1.41	15.9	0.15	1.39	0.93	74
	75	ISL	9.86	9.85	33.444	25.762	223.9	0.214	5.39	84.1	21.9	1.46	16.6	0.16	1.20	0.83	76
1	83		9.38	9.37	33.494	25.880	212.8	0.232	4.68	72.3	24.8	1.63	19.5	0.20	0.39	0.42	84
1	99		8.96	8.95	33.524	25.970	204.4	0.265	4.18	64.0	25.1	1.70	21.1	0.11	0.22	0.38	100
	100	ISL	8.96	8.95	33.536	25.980	203.5	0.267	4.17	63.8	25.3	1.71	21.2	0.12	0.22	0.38	101
1	114		9.01	9.00	33.723	26.119	190.7	0.295	4.07	62.4	29.4	1.86	23.3	0.26	0.22	0.39	115
	125	ISL	8.84	8.83	33.801	26.207	182.5	0.315	3.83	58.6	31.7	1.95	24.8	0.25	0.18	0.34	126
1	130		8.73	8.72	33.824	26.242	179.2	0.324	3.71	56.6	32.5	1.98	25.4	0.25	0.15	0.31	131
	150	ISL	8.26	8.24	33.869	26.349	169.3	0.359	3.31	50.0	33.9	2.00	26.4	0.07	0.05	0.17	151
1	155		8.15	8.13	33.874	26.370	167.4	0.367	3.23	48.6	34.2	2.01	26.5	0.02	0.02	0.14	156
1	181		7.84	7.82	33.916	26.449	160.3	0.410	3.02	45.2	38.5	2.10	27.7	0.01			183
	200	ISL	7.63	7.61	33.950	26.506	155.1	0.440	2.93	43.6	40.7	2.15	28.6	0.01			202
1	212		7.49	7.47	33.969	26.541	151.9	0.458	2.86	42.4	42.2	2.19	29.2	0.01			214
1	244		7.06	7.04	34.004	26.629	143.9	0.506	2.50	36.7	48.7	2.37	31.3	0.01			246
	250	ISL	6.97	6.95	34.009	26.646	142.4	0.514	2.43	35.6	50.1	2.40	31.8	0.01			252
1	285		6.52	6.49	34.032	26.724	135.2	0.563	2.03	29.4	57.4	2.54	34.4	0.01			287
	300	ISL	6.39	6.36	34.040	26.748	133.1	0.583	1.91	27.6	59.6	2.59	35.0	0.01			303
1	342		6.12	6.09	34.058	26.797	128.9	0.638	1.62	23.3	64.6	2.72	36.4	0.00			345
	400	ISL	5.73	5.70	34.086	26.868	122.6	0.711	1.24	17.7	72.0	2.87	38.8	0.01			404
1	404		5.70	5.67	34.088	26.874	122.1	0.716	1.22	17.4	72.6	2.88	39.0	0.01			408
1	470		5.15	5.11	34.113	26.959	114.3	0.794	0.88	12.4	83.4	3.06	41.3	0.01			474
	500	ISL	5.04	5.00	34.134	26.989	111.7	0.828	0.76	10.6	86.8	3.10	41.9	0.01			505
1	541		4.90	4.86	34.162	27.027	108.4	0.873	0.59	8.2	91.4	3.15	42.7	0.00			546

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 115

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
38 15.8 N	123 55.1 W	06/05/87	0335 GMT	2317 M	330	10 KT			1014.9 MB	12.2 C	11.7 C	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	9	12.70	12.70	32.563	24.565	336.4		6.35	104.9	2.4	0.45	0.1	0.00	0.18	0.03	9

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 117

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
38 6.3 N	123 48.9 W	06/05/87	0516 GMT	3001 M	320	12 KT			1016.4 MB	11.7 C	11.4 C	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	6	12.57	12.57	32.553	24.582	334.7		6.40	105.4	2.7	0.47	0.1	0.00	0.18	0.10	6

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 120

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
37 56.2 N	123 57.5 W	06/05/87	0805 GMT	4395 M	320	11 KT			1015.9 MB	14.8 C	13.4 C	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	6	12.72	12.72	32.571	24.567	336.2		6.31	104.3	2.1	0.46	0.1	0.00			6

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 122

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
38 5.9 N	124 4.4 W	06/05/87	1009 GMT	4343 M	320	14 KT			1015.1 MB	13.6 C	13.2 C	

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	12.83	12.83	32.576	24.549	337.7	0.000	6.29	104.2	2.2	0.44	0.0	0.00	0.12	0.03	0
1	1		12.83	12.83	32.576	24.549	337.7	0.003	6.29	104.2	2.2	0.44	0.0	0.00	0.12	0.03	1
	10	ISL	12.84	12.84	32.576	24.548	338.1	0.034	6.31	104.5	2.1	0.45	0.0	0.00	0.13	0.04	10
1	16		12.85	12.85	32.576	24.546	338.4	0.054	6.33	104.9	2.1	0.45	0.0	0.00	0.13	0.05	16
	20	ISL	12.80	12.80	32.579	24.558	337.4	0.068	6.33	104.8	2.2	0.45	0.0	0.00	0.13	0.05	20
	30	ISL	12.69	12.69	32.588	24.586	334.9	0.101	6.32	104.4	2.3	0.44	0.0	0.00	0.13	0.05	30
1	31		12.68	12.68	32.589	24.589	334.7	0.105	6.32	104.4	2.3	0.44	0.0	0.00	0.13	0.05	31
1	41		12.72	12.71	32.798	24.744	320.2	0.137	6.32	104.6	3.0	0.43	0.0	0.00	0.24	0.11	41
	50	ISL	12.72	12.71	32.879	24.807	314.5	0.166	6.22	103.0	3.8	0.48	0.1	0.02	0.44	0.31	50
1	51		12.72	12.71	32.885	24.811	314.0	0.169	6.21	102.8	3.9	0.49	0.1	0.02	0.47	0.33	51
1	61		12.44	12.43	32.900	24.877	308.0	0.200	6.22	102.4	4.0	0.48	0.2	0.17	0.83	0.43	61
1	72		11.72	11.71	32.877	24.995	297.0	0.233	5.99	97.1	5.2	0.65	3.0	0.15	0.32	0.25	73
	75	ISL	11.62	11.61	32.881	25.016	295.0	0.242	5.96	96.4	5.5	0.68	3.5	0.11	0.26	0.23	76
1	82		11.42	11.41	32.915	25.079	289.2	0.263	5.83	93.9	6.6	0.76	4.8	0.03	0.17	0.21	83
1	98		10.44	10.43	33.164	25.446	254.5	0.306	4.96	78.3	12.8	1.20	12.6	0.02	0.06	0.15	99
	100	ISL	10.35	10.34	33.190	25.482	251.1	0.311	4.87	76.7	13.5	1.24	13.4	0.02	0.05	0.15	101
1	112		9.88	9.87	33.329	25.670	233.4	0.340	4.44	69.3	17.0	1.46	17.0	0.01	0.02	0.16	113
	125	ISL	9.50	9.49	33.441	25.820	219.3	0.370	4.09	63.3	19.9	1.59	19.4	0.01	0.02	0.13	126
1	127		9.45	9.44	33.456	25.840	217.5	0.374	4.04	62.5	20.3	1.61	19.7	0.01	0.02	0.13	128
	150	ISL	8.84	8.82	33.662	26.098	193.3	0.421	3.65	55.8	25.6	1.79	22.9	0.02	0.01	0.12	151
1	154		8.75	8.73	33.698	26.141	189.3	0.429	3.59	54.7	26.5	1.82	23.4	0.02	0.01	0.12	155
1	178		8.46	8.44	33.894	26.339	170.9	0.472	3.09	46.9	32.0	2.00	26.2	0.02			179
	200	ISL	8.04	8.02	33.939	26.438	161.7	0.509	3.08	46.3	36.2	2.05	27.6	0.01			202
1	210		7.84	7.82	33.938	26.467	159.1	0.525	3.07	45.9	37.6	2.08	27.9	0.01			212
1	239		7.40	7.38	33.952	26.541	152.3	0.570	3.41	50.5	38.7	2.01	27.3	0.01			241
	250	ISL	7.32	7.30	33.966	26.563	150.3	0.587	3.27	48.3	40.3	2.06	28.0	0.01			252
1	281		7.14	7.11	34.007	26.621	145.3	0.632	2.64	38.9	46.2	2.28	30.9	0.01			283
	300	ISL	6.96	6.93	34.020	26.656	142.2	0.660	2.38	34.9	49.4	2.38	32.3	0.01			303
1	337		6.63	6.60	34.042	26.718	136.6	0.711	1.93	28.1	55.5	2.56	34.6	0.01			340
1	398		6.33	6.29	34.109	26.811	128.5	0.792	1.20	17.3	64.7	2.86	37.8	0.00			402
	400	ISL	6.31	6.27	34.109	26.813	128.3	0.795	1.19	17.2	65.0	2.87	37.9	0.00			404
1	463		5.62	5.58	34.120	26.909	119.5	0.873	0.90	12.8	75.8	3.01	40.4	0.00			467
	500	ISL	5.40	5.36	34.142	26.953	115.5	0.916	0.75	10.6	80.9	3.08	41.3	0.00			505
1	534		5.20	5.16	34.163	26.994	111.9	0.955	0.61	8.6	85.6	3.15	42.1	0.00			539

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 124

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
38 15.7 N	124 10.7 W	06/05/87	1250 GMT	4419 M	320	09 KT	320 04 05		1015.8 MB	14.0 C	13.0 C	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	7	12.17	12.17	32.494	24.612	331.9		6.53	106.6	1.8	0.44	0.1	0.00	0.76	0.24	7

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 126

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
38 24.8 N	124 17.1 W	06/05/87	1437 GMT	3657 M	320	09 KT	320 03 05	0	1015.9 MB	13.9 C	13.7 C	0/8

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	6	12.11	12.11	32.480	24.613	331.8		6.60	107.6	1.1	0.44	0.0	0.00	0.98	0.10	6

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 128

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
38 33.8 N	124 24.5 W	06/05/87	1649 GMT	3542 M	310	10 KT	330 04 06	0	1016.1 MB	15.8 C	14.5 C	0/8

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	12.40	12.40	32.540	24.604	332.4	0.000	6.40	105.0	3.2	0.43	0.1	0.01	0.29	0.11	0
1	2		12.40	12.40	32.540	24.604	332.5	0.007	6.40	105.0	3.2	0.43	0.1	0.01	0.29	0.11	2
	10	ISL	12.38	12.38	32.545	24.612	331.9	0.033	6.41	105.2	3.1	0.42	0.1	0.01	0.31	0.12	10
1	18		12.35	12.35	32.549	24.621	331.3	0.060	6.43	105.4	3.1	0.42	0.1	0.01	0.34	0.13	18
	20	ISL	12.33	12.33	32.554	24.629	330.6	0.066	6.43	105.4	3.1	0.42	0.1	0.01	0.36	0.14	20
	30	ISL	12.21	12.21	32.581	24.673	326.7	0.099	6.42	105.0	3.3	0.44	0.1	0.03	0.48	0.21	30
1	33		12.17	12.17	32.589	24.687	325.4	0.109	6.42	104.9	3.4	0.44	0.1	0.03	0.52	0.25	33
1	43		11.13	11.12	32.623	24.903	304.9	0.141	6.34	101.3	6.0	0.61	1.2	0.45	0.69	0.44	43
	50	ISL	11.25	11.24	32.712	24.951	300.5	0.162	6.22	99.7	6.0	0.63	1.7	0.30	0.55	0.39	50
1	53		11.35	11.34	32.746	24.960	299.8	0.171	6.16	99.0	6.0	0.63	2.0	0.20	0.46	0.35	53
1	63		10.91	10.90	32.730	25.026	293.7	0.200	5.95	94.7	7.6	0.76	4.1	0.13	0.32	0.20	64
1	74		10.20	10.19	32.728	25.146	282.4	0.232	5.59	87.5	10.7	0.99	7.7	0.06	0.19	0.13	75
	75	ISL	10.18	10.17	32.750	25.167	280.4	0.235	5.56	87.1	10.9	1.01	8.0	0.06	0.18	0.13	76
1	84		10.03	10.02	32.976	25.369	261.4	0.259	5.29	82.7	12.6	1.15	10.4	0.05	0.12	0.11	85
1	99		9.27	9.26	33.124	25.609	238.8	0.297	4.95	76.1	16.9	1.33	13.9	0.03	0.04	0.10	1 0
	100	ISL	9.21	9.20	33.135	25.627	237.1	0.299	4.93	75.7	17.2	1.34	14.2	0.03	0.04	0.10	101
1	114		8.65	8.64	33.350	25.883	212.9	0.331	4.52	68.6	21.9	1.57	18.5	0.02	0.02	0.08	115
	125	ISL	8.78	8.77	33.645	26.094	193.2	0.353	3.67	56.0	26.0	1.77	22.4	0.01	0.01	0.10	126
1	129		8.86	8.85	33.748	26.162	186.8	0.361	3.36	51.4	27.4	1.84	23.6	0.01	0.01	0.11	130
	150	ISL	8.54	8.52	33.896	26.328	171.4	0.398	3.09	46.9	31.6	1.98	25.8	0.01	0.00	0.14	151
1	153		8.47	8.45	33.896	26.339	170.4	0.403	3.05	46.3	32.0	1.99	25.8	0.01	0.00	0.14	154
1	178		8.26	8.24	33.965	26.425	162.6	0.445	2.91	43.9	34.9	2.07	27.0	0.01			179
	200	ISL	7.94	7.92	33.989	26.492	156.6	0.480	2.92	43.8	37.7	2.10	27.7	0.01			202
1	208		7.81	7.79	33.992	26.513	154.6	0.493	2.92	43.6	38.7	2.11	27.9	0.01			210
1	237		7.41	7.39	33.994	26.573	149.3	0.537	2.95	43.7	42.0	2.14	28.8	0.01			239
	250	ISL	7.23	7.21	33.991	26.595	147.3	0.556	2.90	42.8	43.9	2.18	29.4	0.01			252
1	278		6.88	6.85	33.989	26.642	143.1	0.597	2.70	39.5	48.5	2.29	31.1	0.01			280
	300	ISL	6.69	6.66	33.999	26.676	140.1	0.628	2.44	35.5	52.1	2.41	32.6	0.01			303
1	334		6.44	6.41	34.023	26.728	135.5	0.675	1.99	28.8	57.7	2.59	35.0	0.02			337
1	392		6.01	5.98	34.062	26.814	127.8	0.751	1.39	19.9	67.5	2.82	38.4	0.00			395
	400	ISL	5.95	5.92	34.066	26.825	126.8	0.761	1.32	18.9	68.8	2.86	38.8	0.00			404
1	457		5.53	5.49	34.101	26.905	119.7	0.831	0.94	13.3	77.7	3.07	41.0	0.00			461
	500	ISL	5.26	5.22	34.137	26.966	114.2	0.882	0.73	10.3	84.4	3.13	42.4	0.00			505
1	527		5.09	5.05	34.161	27.005	110.6	0.912	0.60	8.4	88.6	3.16	43.2	0.00			532

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 132

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
38 52.2 N	124 37.3 W	06/05/87	2216 GMT	3532 M	320	12 KT			1013.3 MB	14.2 C	13.0 C	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	26	12.75	12.75	32.649	24.622	331.4		6.29	104.1	2.3	0.44	0.0	0.00	0.19	0.05	26

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 134

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
39 1.0 N	124 43.6 W	07/05/87	0025 GMT	3354 M	320	12 KT	330 05 07	0	1013.2 MB	15.4 C	14.6 C	0/8

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	13.33	13.33	32.745	24.582	334.6	0.000	6.23	104.4	2.3	0.45	0.0	0.00	0.16	0.03	0
1	1		13.33	13.33	32.745	24.582	334.6	0.003	6.23	104.4	2.3	0.45	0.0	0.00	0.16	0.03	1
	10	ISL	13.23	13.23	32.741	24.599	333.2	0.033	6.24	104.3	2.3	0.45	0.0	0.00	0.17	0.04	10
1	11	A	13.21	13.21	32.741	24.603	332.9	0.037			2.3	0.45	0.0	0.00	0.17	0.04	11
	20	ISL	13.03	13.03	32.746	24.642	329.3	0.067	6.26	104.2	2.4	0.45	0.0	0.00	0.18	0.04	20
1	22		12.99	12.99	32.748	24.652	328.5	0.073	6.26	104.2	2.4	0.45	0.0	0.00	0.18	0.04	22
	30	ISL	12.97	12.97	32.748	24.656	328.3	0.099	6.26	104.1	2.6	0.44	0.0	0.00	0.22	0.05	30
1	32		12.97	12.97	32.748	24.656	328.4	0.106	6.26	104.1	2.6	0.44	0.0	0.00	0.24	0.06	32
1	42		12.61	12.60	32.764	24.739	320.7	0.138	6.31	104.2	2.5	0.47	0.0	0.01	0.44	0.14	42
	50	ISL	12.01	12.00	32.761	24.850	310.2	0.164	6.33	103.2	3.1	0.52	0.5	0.13	0.76	0.27	50
1	52		11.86	11.85	32.763	24.880	307.5	0.170	6.33	102.8	3.3	0.53	0.7	0.17	0.82	0.30	52
1	62		11.60	11.59	32.829	24.979	298.2	0.200	6.14	99.2	4.8	0.62	2.1	0.47	0.64	0.32	63
1	72		10.49	10.48	32.943	25.265	271.1	0.229	5.50	86.8	10.3	1.02	9.4	0.03	0.22	0.12	73
	75	ISL	10.29	10.28	32.991	25.336	264.3	0.237	5.36	84.2	11.8	1.11	11.0	0.03	0.19	0.11	76
1	88		9.77	9.76	33.205	25.591	240.4	0.269	4.86	75.6	17.4	1.39	15.8	0.02	0.06	0.06	89
	100	ISL	9.48	9.47	33.360	25.759	224.6	0.297	4.51	69.8	20.6	1.56	18.6	0.01	0.04	0.05	101
1	103		9.43	9.42	33.398	25.797	221.0	0.304	4.42	68.3	21.3	1.59	19.2	0.01	0.04	0.05	104
1	123		9.01	9.00	33.705	26.105	192.2	0.345	3.69	56.6	27.8	1.87	23.8	0.01	0.03	0.06	124
	125	ISL	8.99	8.98	33.721	26.121	190.7	0.349	3.65	56.0	28.2	1.89	24.0	0.01	0.03	0.06	126
1	149		8.77	8.75	33.826	26.238	180.0	0.394	3.34	51.0	31.1	2.00	25.8	0.00	0.03	0.06	150
	150	ISL	8.76	8.74	33.829	26.241	179.6	0.395	3.33	50.8	31.2	2.00	25.9	0.00			151
1	179		8.50	8.48	33.897	26.335	171.2	0.446	3.04	46.1	33.9	2.08	27.0	0.00			181
	200	ISL	8.30	8.28	33.926	26.389	166.5	0.482	2.96	44.7	35.5	2.12	27.7	0.01			202
1	211		8.21	8.19	33.937	26.411	164.5	0.500	2.93	44.2	36.2	2.14	28.0	0.01			213
1	241		8.04	8.02	33.965	26.459	160.5	0.549	2.81	42.2	38.3	2.17	28.6	0.01			243
	250	ISL	7.99	7.96	33.970	26.470	159.5	0.563	2.78	41.7	38.9	2.18	28.8	0.01			252
1	282		7.78	7.75	33.984	26.512	156.0	0.614	2.70	40.3	41.2	2.22	29.5	0.01			284
	300	ISL	7.64	7.61	33.994	26.541	153.5	0.641	2.67	39.7	42.6	2.24	29.9	0.01			303
1	339		7.28	7.25	34.014	26.608	147.6	0.700	2.54	37.5	46.4	2.32	31.2	0.01			342
1	400		6.61	6.57	34.040	26.720	137.4	0.787	2.02	29.4	56.2	2.56	34.5	0.01			404
1	467		5.79	5.75	34.094	26.868	123.6	0.875	1.29	18.4	72.3	2.87	38.6	0.02			471
	500	ISL	5.50	5.46	34.097	26.906	120.1	0.915	1.10	15.6	77.2	2.97	39.9	0.01			505
1	538		5.16	5.12	34.103	26.951	115.9	0.960	0.89	12.5	82.8	3.08	41.5	0.00			543

A) AN OXYGEN TITRATION ERROR HAS BEEN ASSUMED FOR THE OXYGEN VALUES BETWEEN 11 AND 339 M. THE TITERS APPEAR TO HAVE BEEN RECORDED WITH INCORRECT FLASK NUMBERS (VOLUMES). THE OXYGEN DATA AS LISTED FOR THIS STATION APPEAR TO BE CORRECT BASED UPON ADJACENT STATION CTDO PROFILES. THEY SHOULD HOWEVER, BE USED WITH CAUTION.

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 136

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
39 10.0 N	124 49.9 W	07/05/87	0247 GMT	3082 M	330	12 KT			1014.6 MB	12.8 C	12.4 C	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	22	13.03	13.03	32.740	24.638	329.8		6.26	104.2	2.2	0.44	0.0	0.00	0.18	0.05	22

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 138

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
39 19.0 N	124 56.2 W	07/05/87	0414 GMT		330	12 KT			1014.7 MB	12.2 C	12.0 C	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	6	13.28	13.28	32.697	24.554	337.3		6.23	104.3	2.1	0.44	0.0	0.00	0.15	0.04	6

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 140

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
39 27.5 N	125 2.9 W	07/05/87	0638 GMT	2841 M	330	12 KT			1013.2 MB	15.0 C	13.0 C	

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	12.86	12.86	32.592	24.556	337.0	0.000	6.32	104.8	1.5	0.43	0.1	0.00	0.16	0.04	0
1	1		12.86	12.86	32.592	24.556	337.1	0.003	6.32	104.8	1.5	0.43	0.1	0.00	0.16	0.04	1
	10	ISL	12.87	12.87	32.592	24.554	337.4	0.034	6.35	105.3	1.3	0.44	0.1	0.00	0.16	0.05	10
1	11		12.87	12.87	32.592	24.554	337.5	0.037	6.35	105.3	1.3	0.44	0.1	0.00	0.16	0.05	11
	20	ISL	12.91	12.91	32.604	24.556	337.6	0.067	6.34	105.2	1.5	0.43	0.0	0.00	0.14	0.04	20
1	22		12.92	12.92	32.608	24.557	337.5	0.074	6.34	105.2	1.6	0.43	0.0	0.00	0.13	0.04	22
	30	ISL	12.99	12.99	32.656	24.581	335.5	0.101	6.28	104.4	1.8	0.43	0.1	0.00	0.13	0.06	30
1	32		13.00	13.00	32.669	24.589	334.7	0.108	6.27	104.3	1.8	0.43	0.1	0.00	0.13	0.06	32
1	42		12.94	12.93	32.697	24.623	331.7	0.141	6.28	104.3	2.0	0.43	0.1	0.00	0.14	0.05	42
	50	ISL	12.74	12.73	32.781	24.727	322.1	0.167	6.32	104.6	2.1	0.43	0.1	0.00	0.22	0.10	50
1	53		12.59	12.58	32.802	24.772	317.8	0.177	6.33	104.5	2.2	0.43	0.1	0.00	0.27	0.13	53
1	63		11.56	11.55	32.702	24.888	306.9	0.208	6.34	102.3	3.7	0.56	1.3	0.17	0.59	0.28	64
1	73		11.24	11.23	32.724	24.963	300.0	0.239	6.13	98.2	4.8	0.65	2.8	0.38	0.32	0.23	74
	75	ISL	11.20	11.19	32.754	24.993	297.1	0.244	6.06	97.0	5.0	0.67	3.3	0.35	0.28	0.22	76
1	90		10.92	10.91	33.081	25.298	268.5	0.287	5.44	86.7	8.5	0.91	8.3	0.02	0.11	0.17	91
	100	ISL	9.76	9.75	33.153	25.552	244.3	0.313	5.08	79.0	13.7	1.19	13.4	0.01	0.05	0.11	101
1	105		9.16	9.15	33.185	25.674	232.7	0.324	4.91	75.3	16.5	1.33	15.8	0.01	0.03	0.08	106
1	125		8.64	8.63	33.451	25.963	205.5	0.368	4.36	66.2	22.6	1.57	20.2	0.01	0.01	0.08	126
	150	ISL	8.04	8.02	33.702	26.251	178.5	0.416	4.11	61.7	28.1	1.73	22.9	0.01	0.01	0.06	151
1	151		8.02	8.00	33.710	26.260	177.7	0.418	4.10	61.5	28.3	1.73	23.0	0.01	0.01	0.06	152
1	181		7.90	7.88	33.932	26.453	159.9	0.469	3.34	50.0	35.5	1.96	27.0	0.01			183
	200	ISL	7.49	7.47	33.951	26.527	153.0	0.498	3.49	51.8	38.1	1.94	27.1	0.01			202
1	212		7.22	7.20	33.943	26.559	150.1	0.517	3.63	53.5	39.4	1.92	27.1	0.01			214
1	243		6.92	6.90	33.963	26.616	145.0	0.562	3.30	48.3	44.1	2.06	29.1	0.01			245
	250	ISL	6.86	6.84	33.968	26.628	144.0	0.572	3.17	46.3	45.5	2.11	29.7	0.01			252
1	284		6.61	6.58	33.994	26.682	139.2	0.621	2.48	36.0	52.6	2.36	32.9	0.01			286
	300	ISL	6.49	6.46	34.005	26.707	137.0	0.643	2.26	32.8	55.4	2.44	34.0	0.01			303
1	342		6.17	6.14	34.031	26.769	131.5	0.699	1.82	26.2	62.1	2.61	36.5	0.01			345
	400	ISL	5.80	5.77	34.061	26.840	125.3	0.774	1.35	19.3	70.2	2.83	39.2	0.00			404
1	403		5.78	5.75	34.062	26.843	125.0	0.777	1.33	19.0	70.6	2.84	39.3	0.00			407
1	470		5.28	5.24	34.093	26.928	117.3	0.859	0.98	13.8	80.6	2.99	41.5	0.00			474
	500	ISL	5.13	5.09	34.119	26.967	113.9	0.893	0.83	11.6	85.0	3.06	42.2	0.00			505
1	543		4.91	4.87	34.157	27.022	108.9	0.941	0.61	8.5	91.2	3.16	43.1	0.00			548

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 142

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
39 37.6 N	125 7.7 W	07/05/87	0928 GMT	3052 M	330	08 KT			1013.4 MB	12.9 C	12.7 C	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	7	12.15	12.15	32.369	24.519	340.7		6.57	107.1	0.9	0.42	0.0	0.00	0.30	0.07	7

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 144

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
39 45.4 N	125 15.1 W	07/05/87	1112 GMT	3218 M	320	09 KT			1013.2 MB	12.9 C	12.8 C	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	7	11.94	11.94	32.281	24.490	343.5		6.71	108.9	1.1	0.40	0.0	0.01	0.98	0.08	7

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 146

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
39 36.2 N	125 23.2 W	07/05/87	1344 GMT	3496 M	340	10 KT	330 06 07	0	1013.0 MB	13.3 C	13.2 C	0/8

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	13.24	13.24	32.678	24.548	337.8	0.000	6.22	104.0	2.0	0.43	0.0	0.00	0.16	0.04	0
1	1		13.24	13.24	32.678	24.548	337.9	0.003	6.22	104.0	2.0	0.43	0.0	0.00	0.16	0.04	1
	10	ISL	13.24	13.24	32.680	24.549	337.9	0.034	6.22	104.0	1.9	0.43	0.0	0.00	0.14	0.06	10
1	12		13.24	13.24	32.680	24.550	338.0	0.041	6.22	104.0	1.9	0.43	0.0	0.00	0.14	0.06	12
	20	ISL	13.25	13.25	32.679	24.547	338.4	0.068	6.22	104.0	1.9	0.43	0.0	0.00	0.15	0.05	20
1	22		13.25	13.25	32.679	24.547	338.5	0.074	6.22	104.0	1.9	0.43	0.0	0.00	0.15	0.05	22
	30	ISL	13.04	13.04	32.657	24.572	336.3	0.101	6.27	104.4	1.9	0.43	0.0	0.00	0.20	0.06	30
1	33		12.91	12.91	32.652	24.594	334.3	0.111	6.29	104.4	1.9	0.43	0.0	0.00	0.22	0.07	33
1	43		12.29	12.28	32.698	24.749	319.8	0.144	6.39	104.7	2.0	0.44	0.0	0.00	0.31	0.21	43
	50	ISL	11.95	11.94	32.771	24.869	308.4	0.166	6.34	103.2	3.0	0.51	0.3	0.25	0.69	0.40	50
1	53		11.85	11.84	32.803	24.913	304.4	0.175	6.30	102.3	3.5	0.54	0.5	0.37	0.84	0.47	53
1	64		11.77	11.76	32.846	24.961	300.0	0.209	6.20	100.6	4.1	0.62	1.2	0.59	0.66	0.47	65
1	74		11.73	11.72	32.885	24.999	296.6	0.238	6.05	98.1	5.0	0.64	2.7	0.11	0.44	0.29	75
	75	ISL	11.70	11.69	32.885	25.005	296.1	0.241	6.03	97.7	5.1	0.65	2.9	0.10	0.42	0.28	76
1	90		10.93	10.92	32.948	25.192	278.5	0.284	5.56	88.6	8.6	0.92	7.8	0.02	0.15	0.16	91
	100	ISL	10.17	10.16	33.137	25.471	252.1	0.311	4.96	77.8	13.4	1.22	13.3	0.02	0.06	0.13	101
1	105		9.81	9.80	33.248	25.618	238.2	0.323	4.65	72.4	15.9	1.38	16.0	0.02	0.04	0.13	106
	125	ISL	9.32	9.31	33.557	25.940	207.9	0.368	3.80	58.6	22.5	1.80	21.5	0.02	0.01	0.09	126
1	126		9.31	9.30	33.569	25.951	206.9	0.370	3.77	58.2	22.8	1.81	21.7	0.02	0.01	0.09	127
	150	ISL	8.90	8.88	33.810	26.205	183.2	0.417	3.11	47.6	29.0	1.96	25.7	0.01	0.01	0.09	151
1	152		8.87	8.85	33.824	26.220	181.7	0.420	3.07	47.0	29.4	1.96	25.9	0.01	0.01	0.09	153
1	182		8.35	8.33	33.958	26.406	164.5	0.472	2.92	44.2	34.4	2.05	27.7	0.01			184
	200	ISL	8.08	8.06	33.988	26.470	158.7	0.501	2.97	44.7	36.7	2.11	28.2	0.01			202
1	213		7.88	7.86	33.995	26.506	155.5	0.522	3.01	45.1	38.3		28.6	0.01			215
1	244		7.37	7.35	34.005	26.587	148.1	0.569	2.85	42.2	43.7		30.3	0.01			246
	250	ISL	7.30	7.28	34.008	26.599	147.0	0.578	2.77	40.9	44.8	2.28	30.7	0.01			252
1	285		6.94	6.91	34.030	26.667	141.0	0.628	2.26	33.1	51.1	2.42	33.3	0.01			287
	300	ISL	6.79	6.76	34.036	26.692	138.7	0.649	2.09	30.5	53.8	2.49	34.3	0.01			303
1	341		6.39	6.36	34.053	26.758	132.7	0.705	1.71	24.7	60.9	2.67	36.7	0.01			344
	400	ISL	5.85	5.82	34.079	26.848	124.6	0.781	1.21	17.3	70.9	2.89	39.8	0.00			404
1	403		5.83	5.80	34.081	26.852	124.3	0.784	1.19	17.0	71.4	2.90	39.9	0.00			407
1	471		5.47	5.43	34.142	26.945	116.0	0.866	0.77	10.9	80.6	3.07	41.7	0.00			475
	500	ISL	5.32	5.28	34.164	26.980	112.9	0.899	0.65	9.2	84.6	3.12	42.4	0.00			505
1	543		5.11	5.07	34.197	27.031	108.4	0.947	0.48	6.7	90.6	3.20	43.5	0.00			548

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 148

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
39 27.5 N	125 17.2 W	07/05/87	1601 GMT	3330 M	340	06 KT	350 03 06	0	1012.8 MB	15.0 C	14.2 C	0/8

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	6	13.26	13.26	32.686	24.550	337.8		6.27	104.9	1.9	0.42	0.1	0.00	0.16	0.03	6

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 150

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
39 18.6 N	125 10.1 W	07/05/87	1744 GMT	3052 M					1013.9 MB	13.9 C	12.8 C	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	6	13.17	13.17	32.665	24.552	337.6		6.23	104.0	2.0	0.43	0.0	0.00	0.16	0.02	6

RV NEW HORIZON SQ87 LEG I STATION G 152

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
39 9.3 N	125 3.8 W	07/05/87	2010 GMT	3265 M			330 03 06	0	1013.9 MB	18.2 C	16.2 C	0/8

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	13.72	13.72	32.717	24.481	344.2	0.000	6.25	105.6	2.2	0.45	0.0	0.00	0.12	0.01	0
1	1	13.72	13.72	32.717	24.481	344.2	0.003	6.25	105.6	2.2	0.45	0.0	0.00	0.12	0.01	1
	10 ISL	13.37	13.37	32.717	24.552	337.6	0.034	6.24	104.6	2.2	0.43	0.0	0.00	0.14	0.03	10
1	12	13.27	13.27	32.717	24.572	335.8	0.041	6.24	104.4	2.2	0.43	0.0	0.00	0.15	0.03	12
	20 ISL	13.24	13.24	32.717	24.578	335.4	0.068	6.22	104.0	2.2	0.43	0.0	0.00	0.17	0.03	20
1	23	13.23	13.23	32.717	24.580	335.3	0.078	6.22	104.0	2.2	0.43	0.0	0.00	0.17	0.03	23
	30 ISL	13.11	13.11	32.715	24.603	333.4	0.101	6.25	104.2	2.2	0.43	0.0	0.00	0.17	0.03	30
1	33	13.06	13.06	32.714	24.612	332.6	0.111	6.26	104.3	2.2	0.43	0.0	0.00	0.17	0.03	33
1	43	12.99	12.98	32.711	24.624	331.7	0.144	6.26	104.1	2.2	0.44	0.0	0.00	0.24	0.04	43
	50 ISL	12.92	12.91	32.706	24.634	330.9	0.168	6.28	104.3	2.1	0.42	0.0	0.00	0.29	0.06	50
1	53	12.89	12.88	32.710	24.643	330.2	0.177	6.29	104.4	2.1	0.42	0.0	0.00	0.31	0.07	53
1	63	12.37	12.36	32.678	24.719	323.1	0.210	6.39	104.9	2.7	0.45	0.0	0.02	0.83	0.22	64
1	73	11.60	11.59	32.727	24.900	306.0	0.242	6.32	102.1	3.5	0.55	0.8	0.26	0.85	0.39	74
	75 ISL	11.55	11.54	32.738	24.918	304.4	0.248	6.29	101.5	3.6	0.56	1.0	0.25	0.79	0.38	76
1	90	11.22	11.21	32.832	25.051	292.0	0.292	5.92	94.9	6.4	0.74	4.5	0.06	0.27	0.17	91
	100 ISL	10.58	10.57	32.924	25.235	274.6	0.321	5.52	87.3	11.1	1.01	9.2	0.04	0.16	0.10	101
1	104	10.31	10.30	32.969	25.316	266.9	0.332	5.35	84.1	13.1	1.13	11.1	0.03	0.14	0.08	105
1	125	9.64	9.63	33.261	25.656	234.9	0.384	4.73	73.4	19.9	1.46	17.1	0.01	0.04	0.05	126
1	150	8.96	8.94	33.605	26.035	199.3	0.439	3.85	58.9	26.9	1.79	22.9	0.01	0.02	0.07	151
1	181	8.40	8.38	33.769	26.250	179.3	0.497	3.51	53.1	30.5	1.89	25.3	0.01			183
	200 ISL	8.03	8.01	33.874	26.388	166.4	0.530	3.39	50.9	34.2	1.95	26.7	0.01			202
1	211	7.83	7.81	33.926	26.458	159.9	0.548	3.33	49.8	36.4	1.99	27.4	0.01			213
1	242	7.51	7.49	33.977	26.545	152.0	0.596	3.10	46.0	40.7	2.09	29.1	0.01			244
	250 ISL	7.39	7.37	33.979	26.564	150.3	0.608	3.07	45.4	42.0	2.12	29.5	0.01			252
1	282	6.91	6.88	33.978	26.630	144.4	0.656	2.92	42.7	47.5	2.23	31.1	0.01			284
	300 ISL	6.70	6.67	33.985	26.664	141.3	0.681	2.70	39.3	51.0	2.32	32.5	0.01			303
1	338	6.37	6.34	34.010	26.727	135.6	0.734	2.16	31.2	58.1	2.52	35.4	0.01			341
1	400	6.09	6.06	34.072	26.812	128.2	0.816	1.41	20.2	66.6	2.81	38.6	0.01			404
1	468	5.49	5.45	34.108	26.915	118.7	0.900	0.91	12.9	78.2	3.03	41.5	0.00			472
	500 ISL	5.40	5.36	34.142	26.953	115.5	0.937	0.74	10.5	82.5	3.11	42.3	0.00			505
1	540	5.19	5.15	34.186	27.013	110.1	0.982	0.53	7.5	87.9	3.20	43.3	0.00			545

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 154

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
39 0.8 N	124 56.9 W	07/05/87	2221 GMT	3416 M	270	10 KT			1013.2 MB	15.1 C	14.1 C	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	10	13.24	13.24	32.729	24.587	334.3		6.23	104.2	2.5	0.44	0.0	0.01	0.16	0.03	10

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 156

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
38 51.3 N	124 51.2 W	08/05/87	0003 GMT	3511 M	310	06 KT			1012.2 MB	15.4 C	14.3 C	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	11	13.03	13.03	32.655	24.572	335.8		6.30	104.8	2.5	0.44	0.0	0.00	0.14	0.03	11

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 158

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
38 43.0 N	124 45.0 W	08/05/87	0152 GMT	3606 M	320	08 KT	300 05 06	0	1011.2 MB	15.7 C	15.2 C	0/8

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	13.81	13.81	32.618	24.386	353.2	0.000	6.27	106.0	2.3	0.44	0.0	0.01	0.13	0.03	0
1	2		13.81	13.91	32.618	24.386	353.2	0.007	6.27	106.0	2.3	0.44	0.0	0.01	0.13	0.03	2
	10	ISL	13.20	13.20	32.597	24.493	343.3	0.035	6.32	105.5	2.4	0.45	0.0	0.01	0.12	0.03	10
1	13		12.91	12.91	32.588	24.543	338.6	0.045	6.34	105.2	2.4	0.45	0.0	0.01	0.12	0.03	13
	20	ISL	12.72	12.72	32.580	24.574	335.8	0.069	6.37	105.3	2.4	0.44	0.0	0.01	0.14	0.04	20
1	23		12.70	12.70	32.579	24.577	335.6	0.079	6.37	105.2	2.4	0.44	0.0	0.01	0.15	0.04	23
	30	ISL	12.69	12.69	32.594	24.591	334.5	0.102	6.36	105.1	2.4	0.45	0.0	0.00	0.20	0.05	30
1	33		12.69	12.69	32.598	24.594	334.2	0.112	6.35	104.9	2.4	0.45	0.0	0.00	0.22	0.06	33
1	44		12.67	12.66	32.617	24.613	332.7	0.149	6.35	104.9	2.6	0.47	0.0	0.01	0.68	0.17	44
	50	ISL	12.31	12.30	32.616	24.681	326.3	0.169	6.47	106.0	2.8	0.47	0.0	0.01	0.84	0.29	50
1	54		12 2	12.01	32.622	24.741	320.8	0.182	6.53	106.3	3.0	0.47	0.0	0.01	0.88	0.37	54
1	65		11.50	11.49	32.706	24.902	305.6	0.216	6.30	101.5	4.1	0.59	1.1	0.40	0.66	0.39	66
1	75		11.50	11.49	32.752	24.938	302.5	0.247	6.22	100.2	4.7	0.62	1.7	0.47	0.53	0.33	76
1	90		10.60	10.59	32.888	25.203	277.4	0.290	5.56	87.9	10.3	1.00	8.5	0.02	0.16	0.11	91
	100	ISL	10.20	10.19	33.010	25.367	262.0	0.317	5.25	82.4	13.9	1.20	11.9	0.01	0.11	0.09	101
1	106		9.99	9.98	33.087	25.462	253.0	0.332	5.08	79.4	15.8	1.30	13.6	0.01	0.08	0.08	107
	125	ISL	9.17	9.16	33.313	25.773	223.7	0.378	4.53	69.6	20.1	1.54	18.3	0.00	0.03	0.08	126
1	126		9.13	9.12	33.324	25.788	222.3	0.380	4.50	69.1	20.3	1.55	18.5	0.00	0.03	0.08	127
	150	ISL	8.75	8.73	33.585	26.052	197.6	0.430	3.89	59.3	26.5	1.79	22.6	0.00	0.02	0.09	151
1	152		8.73	8.71	33.603	26.069	196.0	0.434	3.85	58.6	27.0	1.81	22.9	0.00	0.02	0.09	153
1	183		7.98	7.96	33.769	26.313	173.2	0.492	3.79	56.8	31.3	1.89	24.9	0.00			185
	200	ISL	7.79	7.77	33.851	26.405	164.7	0.520	3.66	54.6	33.9	1.94	25.9	0.00			202
1	213		7.68	7.66	33.904	26.463	159.4	0.541	3.50	52.1	36.2	1.99	26.8	0.00			215
1	244		7.35	7.33	33.980	26.570	149.6	0.589	2.93	43.3	42.9	2.20	29.5	0.00			246
	250	ISL	7.29	7.27	33.985	26.583	148.5	0.598	2.88	42.5	43.8	2.22	29.8	0.00			252
1	285		6.93	6.90	33.995	26.640	143.4	0.649	2.64	38.7	48.8	2.34	31.6	0.01			287
	300	ISL	6.79	6.76	34.004	26.667	141.1	0.671	2.46	35.9	51.2	2.41	32.6	0.01			303
1	341		6.43	6.40	34.034	26.738	134.6	0.727	1.93	27.9	58.1	2.62	35.3	0.00			344
	400	ISL	6.03	6.00	34.078	26.825	127.0	0.804	1.29	18.5	67.8	2.89	38.5	0.00			404
1	402		6.02	5.99	34.080	26.828	126.7	0.807	1.27	18.2	68.1	2.90	38.6	0.00			406
1	470		5.86	5.82	34.155	26.908	120.0	0.891	0.67	9.6	74.2	3.09	40.5	0.00			474
	500	ISL	5.65	5.61	34.165	26.941	116.9	0.926	0.63	9.0	78.7	3.14	41.2	0.00			505
1	543		5.35	5.30	34.179	26.989	112.6	0.976	0.58	8.2	85.2	3.20	42.2	0.00			548

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 160

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
38 34.2 N	124 37.6 W	08/05/87	0421 GMT	3703 M					1014.0 MB	12.8 C	12.5 C	

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	11		12.88	12.88	32.586	24.548	338.1		6.34	105.1	2.4	0.45	0.0	0.01	0.14	0.03	11

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 162

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WFATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
38 24.8 N	124 31.0 W	08/05/87	0609 GMT	3574 M					1014.2 MB	12.2 C	12.2 C	

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	12		12.95	12.95	32.590	24.537	339.2		6.41	106.5	2.2	0.44	0.0	0.01	0.13	0.03	12

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 164

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
38 15.4 N	124 24.6 W	08/05/87	0808 GMT	3774 M	250	08 KT			1014.1 MB	14.1 C	14.1 C	

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	13.23	13.23	32.582	24.475	344.7	0.000	6.29	105.1	2.1	0.45	0.1	0.00	0.14	0.04	0
1	1		13.23	13.23	32.582	24.475	344.8	0.003	6.29	105.1	2.1	0.45	0.1	0.00	0.14	0.04	1
	10	ISL	13.15	13.15	32.571	24.483	344.2	0.034	6.34	105.7	2.0	0.45	0.1	0.00	0.17	0.05	10
1	11		13.14	13.14	32.570	24.484	344.2	0.038	6.35	105.9	2.0	0.45	0.1	0.00	0.17	0.05	11
	20	ISL	12.59	12.59	32.535	24.564	336.7	0.069	6.42	105.8	2.0	0.44	0.0	0.00	0.15	0.05	20
1	22		12.47	12.47	32.528	24.582	335.1	0.075	6.43	105.7	2.0	0.44	0.0	0.00	0.15	0.05	22
	30	ISL	12.45	12.45	32.525	24.584	335.2	0.102	6.42	105.5	2.1	0.44	0.0	0.00	0.18	0.06	30
1	32		12.44	12.44	32.525	24.586	335.0	0.109	6.41	105.3	2.1	0.44	0.0	0.00	0.19	0.06	32
1	43		12.40	12.39	32.522	24.591	334.7	0.146	6.40	105.0	2.1	0.44	0.0	0.00	0.21	0.09	43
	50	ISL	11.95	11.94	32.614	24.747	320.0	0.169	6.49	105.5	2.5	0.47	0.1	0.03	0.55	0.22	50
1	53		11.74	11.73	32.658	24.821	313.1	0.178	6.51	105.4	2.8	0.49	0.1	0.05	0.69	0.28	53
1	63		11.53	11.52	32.718	24.906	305.2	0.209	6.30	101.6	3.6	0.57	1.1	0.34	0.61	0.38	64
1	74		11.31	11.30	32.772	24.988	297.6	0.242	6.04	97.0	5.4	0.69	3.5	0.18	0.35	0.23	75
	75	ISL	11.25	11.24	32.780	25.005	296.1	0.245	6.00	96.2	5.7	0.71	3.9	0.17	0.33	0.22	76
1	89		10.33	10.32	32.939	25.289	269.2	0.285	5.45	85.7	10.5	1.04	9.7	0.02	0.13	0.12	90
	100	ISL	9.84	9.83	33.106	25.502	249.1	0.313	5.03	78.3	14.1	1.26	13.5	0.01	0.06	0.11	101
1	106		9.63	9.62	33.200	25.610	238.9	0.328	4.81	74.6	16.0	1.36	15.4	0.01	0.05	0.11	107
	125	ISL	9.05	9.04	33.452	25.900	211.5	0.371	4.23	64.8	22.0	1.64	20.2	0.01	0.04	0.12	126
1	126		9.03	9.02	33.464	25.913	210.4	0.373	4.20	64.4	22.3	1.65	20.4	0.01	0.04	0.12	127
	150	ISL	8.81	8.79	33.753	26.174	186.1	0.420	3.37	51.5	28.4	1.90	24.5	0.01	0.03	0.09	151
1	153		8.80	8.78	33.782	26.198	183.8	0.426	3.28	50.1	29.0	1.92	24.9	0.01	0.03	0.09	154
1	183		8.38	8.36	33.892	26.350	169.9	0.479	3.19	48.3	32.5	2.01	26.5	0.01			185
	200	ISL	8.21	8.19	33.950	26.421	163.4	0.507	3.04	45.9	34.9	2.07	27.5	0.00			202
1	214		8.08	8.06	33.989	26.471	158.8	0.530	2.89	43.5	37.0	2.13	28.4	0.00			216
1	245		7.78	7.76	34.036	26.553	151.5	0.578	2.51	37.5	42.5	2.26	30.4	0.00			247
	250	ISL	7.73	7.71	34.038	26.562	150.8	0.585	2.48	37.0	43.1	2.27	30.6	0.00			252
1	287		7.32	7.29	34.041	26.623	145.4	0.640	2.35	34.7	47.3	2.38	31.9	0.00			289
	300	ISL	7.18	7.15	34.045	26.646	143.3	0.659	2.26	33.3	49.2	2.43	32.5	0.00			303
1	342		6.74	6.71	34.059	26.717	136.9	0.718	1.90	27.7	55.9	2.61	34.8	0.00			345
	400	ISL	6.13	6.09	34.070	26.806	128.9	0.795	1.44	20.7	65.9	2.83	37.9	0.00			404
1	403		6.10	6.06	34.071	26.810	128.4	0.799	1.42	20.4	66.4	2.84	38.1	0.00			407
1	469		5.75	5.71	34.119	26.893	121.2	0.881	0.94	13.4	74.8	3.04	40.4	0.00			473
	500	ISL	5.57	5.53	34.145	26.935	117.4	0.918	0.79	11.2	79.6	3.11	41.3	0.00			505
1	538		5.34	5.30	34.178	26.989	112.5	0.962	0.60	8.5	85.5	3.19	42.4	0.00			543

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 166

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 5.7 N	124 17.4 W	08/05/87	1038 GMT	3733 M	310	03 KT			1013.8 MB	13.1 C	12.9 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	6	12.61	12.61	32.499	24.532	339.4		6.43	106.0	1.4	0.44	0.0	0.00	0.31	0.04	6

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 168

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
37 55.9 N	124 11.0 W	08/05/87	1228 GMT	3733 M	340	06 KT		4	1014.1 MB	13.0 C	12.8 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	7	13.48	13.48	32.722	24.534	339.4		6.23	104.7	2.1	0.45	0.0	0.00	0.15	0.02	7

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 170

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
37 46.8 N	124 5.1 W	08/05/87	1429 GMT	3657 M	330	06 KT	310 02 06	4	1014.8 MB	12.8 C	12.2 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	13.43	13.43	32.600	24.449	347.2	0.000	6.21	104.2	2.1	0.44	0.1	0.00	0.14	0.03	0
1	3	13.43	13.43	32.600	24.449	347.3	0.010	6.21	104.2	2.1	0.44	0.1	0.00	0.14	0.03	3
	10 ISL	13.15	13.15	32.599	24.505	342.?	0.035	6.26	104.4	2.0	0.43	0.1	0.00	0.12	0.04	10
1	13	13.01	13.01	32.600	24.533	339.6	0.045	6.28	104.4	2.0	0.43	0.1	0.00	0.11	0.04	13
	20 ISL	12.95	12.95	32.612	24.554	337.7	0.068	6.28	104.3	2.1	0.44	0.1	0.01	0.12	0.05	20
1	24	12.92	12.92	32.613	24.561	337.2	0.082	6.27	104.1	2.1	0.45	0.1	0.01	0.12	0.05	24
	30 ISL	12.86	12.86	32.625	24.582	335.3	0.102	6.30	104.5	2.2	0.44	0.1	0.00	0.16	0.06	30
1	34	12.82	12.82	32.631	24.595	334.2	0.116	6.31	104.5	2.4	0.43	0.1	0.00	0.19	0.06	34
1	44	12.68	12.67	32.812	24.762	318.5	0.148	6.28	103.8	3.3	0.43	0.1	0.00	0.31	0.12	44
	50 ISL	12.54	12.53	32.864	24.830	312.3	0.167	6.21	102.4	3.7	0.46	0.3	0.17	0.58	0.24	50
1	55	12.41	12.40				0.183	6.13	100.8	4.0	0.50	0.4	0.30	0.73	0.33	55
1	65	12.15	12.14	32.921	24.949	301.3	0.213	5.98	97.8	4.7	0.59	2.0	0.17	0.32	0.25	66
1	75	11.76	11.75	32.956	25.049	292.0	0.243	5.84	94.8	6.0	0.71	4.1	0.05	0.22	0.20	76
1	91	9.91	9.90	33.136	25.514	247.8	0.286	4.94	77.1	14.1	1.28	13.9	0.02	0.04	0.12	92
	100 ISL	9.54	9.53	33.261	25.672	232.9	0.308	4.58	70.9	17.1	1.45	16.8	0.02	0.03	0.10	101
1	106	9.44	9.43	33.343	25.753	225.3	0.321	4.38	67.7	18.7	1.53	18.1	0.02	0.02	0.10	107
	125 ISL	9.20	9.19	33.560	25.961	205.8	0.362	3.80	58.5	22.8	1.73	21.7	0.03	0.01	0.09	126
1	127	9.18	9.17	33.579	25.979	204.2	0.366	3.75	57.7	23.2	1.75	22.0	0.03	0.01	0.09	128
	150 ISL	8.51	8.49	33.748	26.217	182.0	0.411	3.53	53.5	29.4	1.91	24.6	0.02	0.02	0.09	151
1	152	8.46	8.44	33.760	26.234	180.3	0.414	3.51	53.2	29.9	1.92	24.8	0.02	0.02	0.09	153
1	183	8.61	8.59	33.977	26.381	167.0	0.468	2.38	36.2	37.1	2.23	28.5	0.18			185
	200 ISL	8.57	8.55	34.006	26.410	164.6	0.496	2.32	35.3	38.2	2.26	28.9	0.15			202
1	214	8.47	8.45	34.008	26.427	163.2	0.519	2.27	34.5	38.5	2.28	29.2	0.11			216
1	245	8.07	8.05	34.039	26.512	155.5	0.569	2.41	36.2	40.5	2.27	29.6	0.06			247
	250 ISL	7.96	7.93	34.034	26.525	154.4	0.576	2.45	36.8	41.1	2.27	29.7	0.05			252
1	286	7.20	7.17	34.001	26.608	146.6	0.631	2.63	38.8	46.5	2.31	31.1	0.01			288
	300 ISL	7.08	7.05	34.013	26.634	144.3	0.651	2.48	36.4	48.4	2.37	31.9	0.01			303
1	342	6.85	6.82	34.062	26.705	138.1	0.710	1.89	27.6	54.4	2.57	34.4	0.01			345
	400 ISL	6.23	6.19	34.069	26.792	130.2	0.788	1.50	21.6	63.6	2.80	37.4	0.01			404
1	404	6.19	6.15	34.069	26.797	129.7	0.793	1.48	21.3	64.2	2.81	37.6	0.01			408
1	471	5.76	5.72	34.122	26.894	121.2	0.877	0.98	14.0	74.5	3.01	40.3	0.02			475
	500 ISL	5.51	5.47	34.138	26.937	117.2	0.912	0.83	11.8	77.1	3.08	41.1	0.01			505
1	544	5.12	5.08	34.163	27.003	111.0	0.962	0.60	8.4	81.0	3.19	42.2	0.00			549

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 171

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
37 35.7 N	124 13.5 W	08/05/87	1709 GMT	3733 M	310	02 KT	310 02 07	4	1016.8 MB	13.5 C	13.0 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	6	13.15	13.15	32.556	24.471	345.3		6.25	104.2	1.9	0.45	0.1	0.00	0.19	0.02	6

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 175

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
37 55.1 N	124 26.4 W	08/05/87	2133 GMT	3912 M		320 02 07	4	1016.8 MB	15.0 C	14.4 C	

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0		13.57	13.57	32.615	24.433	348.8	0.000	6.21	104.5	2.3	0.42	0.0	0.00	0.16	0.03	0
1	10		13.22	13.22	32.689	24.560	336.9	0.034	6.26	104.6	2.1	0.42	0.0	0.00	0.11	0.03	10
	20	ISL	13.06	13.06	32.694	24.596	333.7	0.068	6.29	104.8	2.3	0.42	0.0	0.00	0.24	0.06	20
1	22		13.04	13.04	32.695	24.601	333.3	0.074	6.29	104.7	2.3	0.42	0.0	0.00	0.27	0.07	22
	30	ISL	12.97	12.97	32.744	24.653	328.6	0.101	6.31	104.9	2.4	0.42	0.0	0.00	0.28	0.10	30
1	31		12.97	12.97	32.754	24.661	327.9	0.104	6.31	104.9	2.4	0.42	0.0	0.00	0.28	0.10	31
1	41		12.98	12.97	32.955	24.814	313.5	0.136	6.26	104.3	3.9	0.41	0.0	0.00	0.49	0.18	41
	50	ISL	12.83	12.82	32.981	24.864	309.0	0.164	6.25	103.8	4.1	0.42	0.0	0.00	0.83	0.31	50
1	51		12.81	12.80	32.979	24.867	308.8	0.167	6.25	103.7	4.1	0.42	0.0	0.00	0.86	0.32	51
1	62		12.58	12.57	33.008	24.934	302.6	0.201	6.04	99.8	4.2	0.50	0.5	0.36	0.85	0.40	63
1	72		11.89	11.88	33.010	25.066	290.2	0.231	5.92	96.4	5.5	0.65	3.2	0.13	0.51	0.32	73
	75	ISL	11.68	11.67	33.042	25.130	284.2	0.239	5.79	93.8	6.6	0.74	4.8	0.09	0.41	0.29	76
1	88		10.98	10.97	33.227	25.401	258.7	0.275	5.10	81.5	11.6	1.10	11.4	0.02	0.09	0.17	89
	100	ISL	10.92	10.91	33.359	25.514	248.1	0.305	4.64	74.1	13.3	1.24	13.8	0.01	0.06	0.15	101
1	103		10.91	10.90	33.382	25.535	246.3	0.312	4.53	72.3	13.6	1.27	14.2	0.01	0.05	0.15	104
1	124		10.46	10.45	33.582	25.769	224.4	0.362	3.72	58.9	17.9	1.55	19.0	0.01	0.02	0.12	125
	125	ISL	10.43	10.42	33.591	25.781	223.2	0.364	3.69	58.4	18.1	1.56	19.2	0.01	0.02	0.12	126
1	150		9.80	9.78	33.773	26.031	200.0	0.417	3.08	48.1	23.6	1.83	23.6	0.01	0.01	0.11	151
1	180		9.28	9.26	33.907	26.221	182.4	0.474	2.69	41.6	28.7	2.02	26.3	0.01			181
	200	ISL	9.01	8.99	33.961	26.307	174.6	0.510	2.59	39.8	31.4	2.09	27.4	0.01			202
1	211		8.87	8.85	33.983	26.346	171.0	0.529	2.56	39.2	32.7	2.12	27.9	0.01			213
1	243		8.46	8.43	34.043	26.457	160.9	0.582	2.40	36.4	36.4	2.20	29.2	0.01			245
	250	ISL	8.36	8.33	34.049	26.477	159.1	0.593	2.39	36.2	37.3	2.22	29.4	0.01			252
1	284		7.91	7.88	34.063	26.556	152.0	0.646	2.33	34.9	41.7	2.30	30.4	0.01			286
	300	ISL	7.73	7.70	34.070	26.587	149.2	0.670	2.24	33.4	43.9	2.36	31.1	0.01			303
1	341		7.30	7.27	34.088	26.663	142.4	0.730	1.90	28.1	50.1	2.54	33.3	0.01			344
	400	ISL	6.70	6.66	34.129	26.778	132.0	0.811	1.30	18.9	60.9	2.79	37.0	0.01			404
1	403		6.67	6.63	34.131	26.784	131.5	0.815	1.27	18.5	61.5	2.80	37.2	0.01			407
1	471		6.07	6.03	34.166	26.890	121.8	0.901	0.85	12.2	72.1	3.02	40.2	0.01			475
	500	ISL	5.83	5.79	34.179	26.931	118.1	0.936	0.73	10.4	76.8	3.08	41.2	0.01			505
1	541		5.48	5.43	34.198	26.989	112.8	0.983	0.55	7.8	83.4	3.17	42.5	0.00			546

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 177

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 5.0 N	124 33.2 W	08/05/87	2358 GMT	3909 M			2	1016.0 MB	14.2 C	13.3 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	13	13.14	13.14	32.629	24.530	339.9		6.30	105.1	2.5	0.46	0.0	0.00	0.20	0.04	13

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 179

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 14.2 N	124 39.2 W	09/05/87	0139 GMT	3889 M			2	1014.9 MB	13.3 C	12.9 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	21	13.06	13.06	32.727	24.622	331.3		6.30	105.0	2.3	0.46	0.0	0.00	0.18	0.04	21

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 181

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 24.4 N	124 46.0 W	09/05/87	0406 GMT	3814 M	310 07 KT	320 04 07	4	1011.4 MB	15.2 C	14.0 C		

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	13.66	13.66	32.689	24.472	345.0	0.000	6.26	105.6	3.0	0.46	0.0	0.00	0.18	0.04	0
1	1		13.66	13.66	32.689	24.472	345.1	0.003	6.26	105.6	3.0	0.46	0.0	0.00	0.18	0.04	1
	10	ISL	13.29	13.29	32.650	24.516	341.1	0.034	6.31	105.6	3.1	0.46	0.0	0.00	0.18	0.04	10
1	12		13.17	13.17	32.639	24.531	339.7	0.041	6.33	105.6	3.1	0.46	0.0	0.00	0.18	0.04	12
	20	ISL	12.89	12.89	32.626	24.577	335.6	0.068	6.38	105.8	3.3	0.45	0.0	0.00	0.22	0.06	20
1	22		12.84	12.84	32.626	24.587	334.7	0.075	6.39	105.9	3.3	0.45	0.0	0.00	0.24	0.07	22
	30	ISL	12.76	12.76	32.630	24.605	333.1	0.102	6.39	105.7	3.4	0.46	0.0	0.00	0.32	0.09	30
1	32		12.74	12.74	32.632	24.611	332.6	0.108	6.39	105.7	3.4	0.46	0.0	0.00	0.36	0.10	32
1	43		12.44	12.43	32.644	24.678	326.4	0.144	6.46	106.2	3.8	0.47	0.0	0.01	0.76	0.31	43
	50	ISL	12.23	12.22	32.761	24.809	314.2	0.167	6.38	104.5	4.4	0.49	0.0	0.05	0.94	0.44	50
1	53		12.19	12.18	32.823	24.865	308.9	0.176	6.32	103.4	4.6	0.50	0.0	0.08	0.96	0.47	53
1	63		12.68	12.67	32.997	24.906	305.3	0.207	6.04	100.0	4.7	0.51	0.0	0.20	0.58	0.23	64
1	74		12.28	12.27	33.060	25.032	293.6	0.240	5.69	93.4	6.3	0.71	2.8	0.14	0.23	0.18	75
	75	ISL	12.22	12.21	33.075	25.055	291.4	0.243	5.64	92.5	6.6	0.74	3.3	0.13	0.21	0.18	76
1	89		11.41	11.40	33.316	25.393	259.5	0.281	4.86	78.4	11.8	1.15	10.9	0.01	0.09	0.15	90
	100	ISL	11.04	11.03	33.438	25.555	244.4	0.309	4.34	69.5	14.8	1.39	14.7	0.01	0.05	0.14	101
1	105		10.91	10.90	33.483	25.613	238.9	0.321	4.13	66.0	16.0	1.48	16.1	0.01	0.04	0.14	106
1	125		10.23	10.22	33.666	25.874	214.4	0.367	3.34	52.6	21.6	1.75	21.2	0.01	0.02	0.10	126
	150	ISL	9.90	9.88	33.776	26.016	201.4	0.418	2.99	46.8	24.7	1.89	23.5	0.01	0.01	0.07	151
1	151		9.89	9.87	33.779	26.020	201.0	0.420	2.99	46.8	24.8	1.89	23.5	0.01	0.01	0.07	152
1	182		9.43	9.41	33.861	26.161	188.2	0.481	2.80	43.4	28.3	2.03	25.9	0.00			184
	200	ISL	9.09	9.07	33.923	26.264	178.6	0.514	2.66	40.9	31.1	2.10	27.3	0.01			202
1	213		8.85	8.83	33.966	26.336	172.0	0.537	2.57	39.3	33.1	2.15	28.2	0.01			215
1	244		8.39	8.36	34.020	26.450	161.6	0.588	2.48	37.6	36.9	2.24	29.4	0.01			246
	250	ISL	8.31	8.28	34.028	26.468	159.9	0.598	2.44	36.9	37.8	2.26	29.7	0.01			252
1	285		7.86	7.83	34.064	26.564	151.3	0.652	2.19	32.8	43.2	2.40	31.7	0.00			287
	300	ISL	7.70	7.67	34.075	26.596	148.4	0.675	2.07	30.9	45.3	2.46	32.5	0.00			303
1	341		7.29	7.26	34.095	26.670	141.8	0.734	1.76	26.0	51.0	2.62	34.7	0.01			344
	400	ISL	6.64	6.60	34.111	26.772	132.5	0.815	1.35	19.6	60.6	2.84	37.7	0.01			404
1	404		6.60	6.56	34.112	26.778	132.0	0.821	1.32	19.2	61.2	2.85	37.9	0.01			408
1	469		6.15	6.11	34.155	26.871	123.7	0.904	0.86	12.4	69.8	3.07	40.4	0.00			473
	500	ISL	5.85	5.81	34.158	26.912	120.0	0.941	0.77	11.0	74.4	3.13	41.4	0.00			505
1	540		5.47	5.42	34.163	26.962	115.3	0.989	0.66	9.3	80.4	3.20	42.8	0.00			545

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 183

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 32.9 N	124 52.8 W	09/05/87	0638 GMT	3789 M	350	06 KT		2	1016.9 MB	11.7 C	11.7 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	10	13.30	13.30	32.712	24.562	336.7		6.27	105.0	3.0	0.46	0.0	0.01	0.16	0.04	10

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 185

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 42.1 N	124 59.1 W	09/05/87	0814 GMT	3551 M	340	08 KT			1016.9 MB	13.1 C	12.9 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	6	13.82	13.82	32.707	24.453	347.0		6.16	104.2	3.0	0.48	0.0	0.01	0.16	0.04	6

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 187

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 50.5 N	125 7.3 W	09/05/87	1008 GMT	3300 M	330	09 KT			1016.2 MB	13.2 C	12.8 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	13.77	13.77	32.704	24.461	346.1	0.000	6.21	105.0	2.8	0.45	0.0	0.00	0.19	0.03	0
1	1	13.77	13.77	32.704	24.461	346.1	0.003	6.21	105.0	2.8	0.45	0.0	0.00	0.19	0.03	1
	10 ISL	13.34	13.34	32.660	24.514	341.3	0.034	6.29	105.4	3.2	0.46	0.0	0.00	0.14	0.03	10
1	11	13.28	13.28	32.654	24.521	340.6	0.038	6.30	105.4	3.2	0.46	0.0	0.00	0.14	0.03	11
	20 ISL	13.09	13.09	32.652	24.558	337.4	0.068	6.30	105.0	3.1	0.46	0.0	0.00	0.19	0.04	20
1	22	13.06	13.06	32.654	24.565	336.7	0.075	6.30	104.9	3.0	0.46	0.0	0.00	0.21	0.04	22
	30 ISL	12.93	12.93	32.645	24.584	335.2	0.102	6.34	105.3	3.0	0.46	0.0	0.00	0.25	0.06	30
1	32	12.90	12.90	32.644	24.589	334.7	0.109	6.35	105.4	3.0	0.46	0.0	0.00	0.26	0.07	32
1	43	12 82	12.81	32.671	24.626	331.5	0.145	6.34	105.1	3.2	0.46	0.0	0.00	0.32	0.12	43
	50 ISL	12.21	12.20	32.628	24.710	323.7	0.168	6.48	106.0	3.4	0.47	0.0	0.00	0.42	0.22	50
1	53	11.98	11.97	32.625	24.750	319.8	0.178	6.52	106.1	3.5	0.48	0.0	0.00	0.48	0.27	53
1	64	12.29	12.28	32.883	24.893	306.6	0.212	6.20	101.7	4.5	0.53	0.1	0.26	0.82	0.36	65
1	74	11.75	11.74	32.932	25.032	293.5	0.242	5.86	95.1	6.2	0.72	3.1	0.09	0.49	0.33	75
	75 ISL	11.74	11.73	32.947	25.045	292.3	0.245	5.84	94.7	6.3	0.73	3.3	0.09	0.46	0.32	76
1	90	11.58	11.57	33.220	25.287	269.6	0.287	5.41	87.6	8.9	0.92	7.0	0.03	0.14	0.18	91
	100 ISL	11.02	11.01	33.371	25.506	249.0	0.313	4.67	74.8	13.4	1.23	12.5	0.02	0.06	0.13	101
1	105	10.70	10.69	33.433	25.611	239.1	0.326	4.29	68.2	15.8	1.39	15.3	0.02	0.04	0.12	106
	125 ISL	9.83	9.82	33.544	25.846	216.9	0.371	3.79	59.2	21.1	1.66	20.1	0.01	0.02	0.10	126
1	126	9.80	9.79	33.548	25.854	216.2	0.373	3.78	59.0	21.3	1.67	20.2	0.01	0.02	0.10	127
	150 ISL	9.27	9.25	33.747	26.097	193.[illegible]	0.422	3.15	48.6	27.3	1.93	24.7	0.01	0.01	0.07	151
1	151	9.25	9.23	33.755	26.106	192.7	0.424	3.13	48.3	27.5	1.94	24.8	0.01	0.01	0.07	152
1	182	8.47	8.45	33.877	26.324	172.3	0.481	3.13	47.5	31.7	2.01	26.5	0.01			184
	200 ISL	8.28	8.26	33.922	26.389	166.5	0.511	3.10	46.8	33.6	2.04	26.8	0.01			202
1	213	8.18	8.16	33.947	26.424	163.4	0.533	3.06	46.1	35.0	2.07	27.1	0.01			215
1	245	7.79	7.77	34.001	26.524	154.2	0.581	2.86	42.7	39.5	2.18	29.5	0.01			245
	250 ISL	7.70	7.68	34.007	26.542	152.6	0.591	2.80	41.7	40.7	2.22	30.0	0.01			252
1	284	7.23	7.20	34.021	26.620	145.5	0.642	2.51	37.0	46.9	2.43	32.1	0.01			286
	300 ISL	6.99	6.96	34.018	26.650	142.7	0.665	2.42	35.5	49.6	2.47	33.0	0.01			303
1	341	6.44	6.41	34.018	26.724	136.0	0.722	2.13	30.8	56.6	2.57	35.4	0.01			344
	400 ISL	6.02	5.99	34.089	26.835	126.0	0.799	1.25	17.9	68.4	2.92	39.8	0.01			404
1	402	6.01	5.98	34.092	26.838	125.7	0.802	1.22	17.5	68.8	2.93	39.9	0.01			406
1	470	5.71	5.67	34.163	26.932	117.4	0.885	0.71	10.1	77.9	3.13	41.9	0.01			474
	500 ISL	5.55	5.51	34.179	26.965	114.6	0.919	0.61	8.7	81.5	3.18	42.7	0.01			505
1	543	5.32	5.28	34.202	27.011	110.6	0.968	0.47	6.6	86.6	3.24	43.8	0.00			548

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 189

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
39 0.0 N	125 13.1 W	09/05/87	1242 GMT	3227 M	300	05 KT			1016.2 MB	13.0 C	13.0 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	8	13.59	13.59	32.632	24.442	348.1		6.14	103.4	2.6	0.50	0.0	0.00	0.16	0.03	8

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 191

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
39 8.9 N	125 19.1 W	09/05/87	1424 GMT	3203 M	320	08 KT		2	1017.4 MB	11.7 C	11.5 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	6	13.90	13.90	32.663	24.403	351.8		6.15	104.2	2.3	0.48	0.0	0.00	0.14	0.02	6

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 193

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
39 17.9 N	125 25.8 W	09/05/87	1627 GMT	3521 M	310	11 KT	310 03 05	2	1017.8 MB	13.2 C	13.0 C	8/8	ST

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	14.03	14.03	32.664	24.377	354.1	0.000	6.14	104.3	1.7	0.44	0.0	0.01	0.13	0.01	0
1	1		14.03	14.03	32.664	24.377	354.1	0.004	6.14	104.3	1.7	0.44	0.0	0.01	0.13	0.01	1
	10	ISL	13.47	13.47	32.649	24.479	344.6	0.035	6.23	104.6	1.6	0.46	0.0	0.01	0.11	0.02	10
1	11		13.39	13.39	32.647	24.494	343.3	0.038	6.24	104.6	1.6	0.46	0.0	0.01	0.11	0.02	11
	20	ISL	13.28	13.28	32.645	24.515	341.5	0.069	6.23	104.2	1.7	0.43	0.0	0.00	0.14	0.03	20
1	21		13.28	13.28	32.646	24.515	341.5	0.073	6.23	104.2	1.7	0.43	0.0	0.00	0.14	0.03	21
	30	ISL	12.96	12.96	32.677	24.603	333.4	0.103	6.29	104.5	2.0	0.45	0.0	0.00	0.17	0.04	30
1	32		12.88	12.88	32.686	24.626	331.3	0.110	6.31	104.7	2.1	0.45	0.0	0.00	0.18	0.04	32
1	42		12.70	12.69	32.729	24.694	324.9	0.142	6.32	104.5	2.4	0.45	0.0	0.01	0.17	0.04	42
	50	ISL	12.59	12.58	32.754	24.735	321.3	0.168	6.34	104.6	2.9	0.45	0.0	0.01	0.29	0.09	50
1	52		12.54	12.53	32.760	24.749	320.0	0.175	6.35	104.7	3.0	0.45	0.0	0.01	0.35	0.11	52
1	62		11.96	11.95	32.786	24.879	307.8	0.206	6.23	101.4	3.5	0.53	0.1	0.29	0.87	0.37	63
1	73		11.72	11.71	32.805	24.939	302.4	0.240	6.16	99.8	4.3	0.59	0.8	0.28	0.79	0.47	74
	75	ISL	11.64	11.63	32.809	24.957	300.7	0.246	6.12	99.0	4.5	0.61	1.2	0.25	0.72	0.43	76
1	88		10.93	10.92	32.916	25.167	280.8	0.284	5.59	89.1	7.7	0.87	6.1	0.03	0.23	0.14	89
	100	ISL	10.14	10.13	33.231	25.550	244.6	0.315	4.70	73.7	14.4	1.30	14.3	0.02	0.06	0.11	101
1	103		9.96	9.95	33.316	25.646	235.5	0.322	4.47	69.9	16.2	1.41	16.3	0.02	0.04	0.10	104
1	125		9.46	9.45	33.601	25.951	206.9	0.371	3.58	55.4	22.5	1.71	22.1	0.01	0.02	0.11	126
1	149		9.03	9.01	33.814	26.187	184.9	0.418	3.03	46.5	27.7	1.92	25.9	0.02	0.02	0.09	150
	150	ISL	9.01	8.99	33.820	26.195	184.1	0.420	3.02	46.4	27.9	1.93	26.0	0.02			151
1	180		8.47	8.45	33.945	26.378	167.2	0.472	2.83	42.9	32.6	2.09	28.1	0.01			182
	200	ISL	8.26	8.24	34.001	26.454	160.3	0.505	2.65	40.0	35.5	2.14	28.9	0.01			202
1	211		8.16	8.14	34.019	26.483	157.7	0.523	2.58	38.9	36.9	2.16	29.2	0.01			213
1	243		7.68	7.66	34.016	26.552	151.6	0.572	2.74	40.8	40.0	2.19	30.0	0.01			245
	250	ISL	7.62	7.60	34.019	26.562	150.6	0.583	2.70	40.2	40.9	2.21	30.3	0.01			252
1	284		7.37	7.34	34.043	26.617	145.9	0.633	2.35	34.8	45.6	2.37	32.4	0.01			286
	300	ISL	7.24	7.21	34.054	26.644	143.5	0.656	2.17	32.0	48.0	2.47	33.4	0.01			303
1	339		6.90	6.87	34.080	26.712	137.5	0.711	1.74	25.5	54.3	2.70	36.0	0.02			342
	400	ISL	6.40	6.36	34.127	26.816	128.1	0.792	1.13	16.4	65.6	2.91	39.6	0.01			404
1	401		6.39	6.35	34.127	26.818	128.0	0.793	1.12	16.2	65.8	2.91	39.7	0.01			405
1	467		5.81	5.77	34.157	26.915	119.1	0.875	0.77	11.0	76.2	3.09	42.5	0.01			471
	500	ISL	5.63	5.59	34.179	26.955	115.6	0.914	0.64	9.1	80.9	3.13	43.3	0.01			505
1	538		5.43	5.39	34.205	27.000	111.6	0.957	0.48	6.8	86.4	3.17	44.3	0.00			543

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 197

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
39 24.7 N	125 51.2 W	09/05/87	2216 GMT	3809 M	320	12 KT	310 04 06	2	1017.5 MB	16.5 C	15.5 C	8/8	ST

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	13.99	13.99	32.765	24.463	345.9	0.000	6.20	105.3	2.7	0.45	0.1	0.00	0.21	0.03	0
1	1		13.99	13.99	32.765	24.463	345.9	0.003	6.20	105.3	2.7	0.45	0.1	0.00	0.21	0.03	1
	10	ISL	13.52	13.52	32.765	24.559	337.0	0.034	6.27	105.5	2.7	0.45	0.1	0.00	0.24	0.06	10
1	11		13.45	13.45	32.765	24.573	335.7	0.038	6.28	105.5	2.7	0.45	0.1	0.00	0.24	0.07	11
	20	ISL	13.27	13.27	32.763	24.608	332.6	0.068	6.38	106.8	2.8	0.44	0.1	0.00	0.32	0.10	20
1	22		13.23	13.23	32.763	24.616	331.9	0.074	6.40	107.0	2.8	0.44	0.1	0.00	0.35	0.11	22
	30	ISL	12.71	12.71	32.763	24.718	322.3	0.100	6.41	106.0	2.8	0.45	0.1	0.00	0.54	0.15	30
1	32		12.59	12.59	32.764	24.742	320.1	0.107	6.41	105.8	2.8	0.45	0.1	0.00	0.61	0.17	32
1	43		12.46	12.45	32.770	24.772	317.5	0.142	6.34	104.3	3.1	0.46	0.1	0.01	1.11	0.41	43
	50	ISL	12.20	12.19	32.793	24.839	311.3	0.164	6.26	102.4	3.5	0.51	0.3	0.20	0.96	0.43	50
1	53		12.07	12.06	32.805	24.873	308.1	0.173	6.22	101.5	3.8	0.54	0.4	0.27	0.85	0.44	53
1	64		11.72	11.71	32.848	24.972	299.0	0.207	6.08	98.5	5.0	0.63	1.8	0.19	0.57	0.34	65
1	74		11.52	11.51	32.920	25.065	290.4	0.236	5.86	94.6	6.3	0.72	3.7	0.04	0.30	0.24	75
	75	ISL	11.47	11.46	32.930	25.082	288.8	0.239	5.82	93.8	6.6	0.74	4.1	0.04	0.29	0.23	76
1	91		10.51	10.50	33.152	25.425	256.4	0.283	4.96	78.4	13.4	1.22	12.3	0.02	0.17	0.17	92
	100	ISL	10.14	10.13	33.330	25.627	237.3	0.305	4.43	69.5	17.5	1.45	16.6	0.01	0.08	0.13	101
1	105		9.99	9.98	33.431	25.731	227.5	0.316	4.13	64.7	19.7	1.56	18.8	0.01	0.04	0.11	106
	125	ISL	9.78	9.77	33.717	25.990	203.3	0.360	3.03	47.3	25.8	1.89	24.4	0.01	0.01	0.09	126
1	126		9.78	9.77	33.728	25.998	202.5	0.362	2.98	46.5	26.0	1.90	24.6	0.01	0.01	0.09	127
	150	ISL	9.47	9.45	33.867	26.158	187.8	0.408	2.51	38.9	30.2	2.07	27.4	0.01	0.01	0.07	151
1	151		9.46	9.44	33.870	26.162	187.4	0.410	2.50	38.8	30.3	2.07	27.5	0.01	0.01	0.07	152
1	182		9.01	8.99	33.943	26.292	175.6	0.467	2.40	36.9	33.6	2.15	28.7	0.01			184
	200	ISL	8.84	8.82	33.975	26.344	171.0	0.498	2.39	36.6	35.0	2.19	29.5	0.01			202
1	213		8.73	8.71	33.994	26.376	168.1	0.520	2.39	36.5	36.0	2.21	30.1	0.01			215
1	245		8.37	8.34	34.031	26.461	160.5	0.572	2.30	34.8	38.8	2.25	30.9	0.00			247
	250	ISL	8.33	8.30	34.039	26.474	159.4	0.580	2.27	34.3	39.3	2.26	31.1	0.00			252
1	285		8.00	7.97	34.083	26.558	151.9	0.635	2.02	30.3	43.8	2.38	32.4	0.01			287
	300	ISL	7.75	7.72	34.085	26.596	148.4	0.657	1.96	29.3	46.3	2.43	33.2	0.01			303
1	341		7.09	7.06	34.092	26.696	139.2	0.716	1.74	25.6	53.7	2.57	35.6	0.00			344
	400	ISL	6.74	6.70	34.164	26.801	130.0	0.796	1.03	15.0	63.5	2.86	38.6	0.00			404
1	403		6.73	6.69	34.168	26.805	129.5	0.800	0.99	14.4	64.0	2.87	38.7	0.00			407
1	470		6.23	6.19	34.185	26.885	122.5	0.884	0.75	10.8	71.7	3.00	40.8	0.01			474
	500	ISL	6.00	5.96	34.200	26.926	118.8	0.920	0.63	9.0	75.7	3.06	41.6	0.01			505
1	542		5.69	5.64	34.222	26.982	113.7	0.969	0.47	6.7	81.4	3.15	42.8	0.00			547

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 199

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
39 15.7 N	125 45.3 W	10/05/87	0039 GMT	3758 M	320	11 KT		2	1017.3 MB	13.0 C	12.7 C	8/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	11		13.71	13.71	32.706	24.475	345.1		6.20	104.7	2.8	0.43	0.0	0.00	0.18	0.04	11

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 201

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
39 6.6 N	125 38.3 W	10/05/87	0232 GMT	3603 M	330	12 KT		2	1018.5 MB	12.8 C	12.2 C	8/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	11		13.54	13.54	32.673	24.484	344.2		6.23	104.8	2.5	0.45	0.0	0.00	0.17	0.03	11

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 203

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
38 57.3 N	125 32.5 W	10/05/87	0446 GMT	3728 M	320	11 KT	320 04 06		1017.7 MB	14.2 C	13.9 C	

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	13.74	13.74	32.668	24.439	348.2	0.000	6.21	104.9	3.7	0.44	0.1	0.00	0.17	0.04	0
1	1		13.74	13.74	32.668	24.439	348.2	0.003	6.21	104.9	3.7	0.44	0.1	0.00	0.17	0.04	1
	10	ISL	13.32	13.32	32.647	24.508	341.9	0.035	6.28	105.1	2.8	0.45	0.1	0.00	0.18	0.04	10
1	11		13.26	13.26	32.644	24.518	341.0	0.038	6.29	105.2	2.7	0.45	0.1	0.00	0.18	0.04	11
	20	ISL	13.10	13.10	32.643	24.549	338.2	0.069	6.30	105.0	2.7	0.43	0.1	0.00	0.20	0.05	20
1	22		13.09	13.09	32.647	24.554	337.8	0.075	6.30	105.0	2.7	0.43	0.1	0.00	0.21	0.05	22
	30	ISL	13.04	13.04	32.688	24.596	334.0	0.102	6.32	105.2	2.2	0.44	0.1	0.00	0.32	0.07	30
1	32		13.03	13.03	32.702	24.609	332.9	0.109	6.32	105.2	2.1	0.44	0.1	0.00	0.35	0.08	32
1	41		12.97	12.96	32.771	24.674	326.9	0.139	6.30	104.8	2.1	0.43	0.1	0.00	0.36	0.13	41
	50	ISL	12.62	12.61	32.812	24.774	317.6	0.168	6.36	105.0	2.7	0.44	0.1	0.00	0.52	0.25	50
1	52		12.52	12.51	32.818	24.798	315.3	0.174	6.37	105.0	2.9	0.44	0.1	0.00	0.58	0.29	52
1	62		12.07	12.06	32.837	24.898	306.0	0.205	6.30	102.8	3.9	0.55	0.9	0.13	1.05	0.50	63
1	72		11.04	11.03	32.911	25.144	282.7	0.234	5.90	94.2	8.3	0.81	5.9	0.29	0.51	0.34	73
	75	ISL	10.85	10.84	32.950	25.208	276.6	0.243	5.73	91.2	9.3	0.89	7.4	0.25	0.39	0.29	76
1	86		10.31	10.30	33.103	25.421	256.6	0.272	5.12	80.6	12.7	1.16	12.2	0.03	0.11	0.14	87
1	100		9.65	9.64	33.258	25.652	234.8	0.306	4.63	71.9	17.4	1.40	16.4	0.01	0.07	0.11	101
1	121		9.23	9.22	33.468	25.885	213.1	0.353	4.11	63.3	22.3	1.62	20.2	0.01	0.03	0.10	122
	125	ISL	9.13	9.12	33.486	25.915	210.3	0.362	4.08	62.7	22.9	1.64	20.6	0.01	0.03	0.10	126
1	145		8.64	8.62	33.566	26.054	197.3	0.403	3.99	60.6	25.7	1.73	22.2	0.01	0.01	0.08	146
	150	ISL	8.55	8.53	33.609	26.101	192.8	0.412	3.88	58.9	27.0	1.77	22.9	0.01			151
1	174		8.23	8.21	33.809	26.307	173.7	0.456	3.39	51.1	32.8	1.95	25.7	0.01			175
	200	ISL	7.92	7.90	33.891	26.418	163.6	0.500	3.36	50.3	35.0	1.97	26.5	0.01			202
1	203		7.89	7.87	33.897	26.427	162.7	0.505	3.36	50.3	35.2	1.97	26.6	0.01			205
1	231		7.64	7.62	33.980	26.529	153.5	0.549	3.02	45.0	40.1	2.09	28.7	0.01			233
	250	ISL	7.49	7.47	34.006	26.571	149.7	0.578	2.81	41.7	42.8	2.17	29.6	0.01			252
1	269		7.33	7.30	34.018	26.603	146.9	0.606	2.61	38.6	45.4	2.26	30.4	0.01			271
	300	ISL	7.03	7.00	34.032	26.656	142.3	0.651	2.31	33.9	50.2	2.40	32.2	0.01			303
1	321		6.81	6.78	34.036	26.689	139.3	0.681	2.13	31.1	53.5	2.48	33.4	0.01			324
1	377		6.16	6.13	34.032	26.772	131.8	0.757	1.78	25.6	62.3	2.65	36.1	0.01			380
	400	ISL	5.97	5.94	34.043	26.805	128.9	0.787	1.56	22.3	65.9	2.74	37.4	0.01			404
1	444		5.70	5.66	34.076	26.865	123.5	0.842	1.14	16.2	72.7	2.92	39.6	0.00			448
	500	ISL	5.47	5.43	34.138	26.942	116.6	0.909	0.77	10.9	80.6	3.07	40.9	0.00			505
1	516		5.41	5.37	34.156	26.963	114.8	0.928	0.66	9.3	82.9	3.11	41.3	0.00			521

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 205

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
38 48.5 N	125 25.3 W	10/05/87	0742 GMT	3733 M	320	16 KT			1018.5 MB	13.6 C	13.2 C	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	5	13.70	13.70	32.688	24.463	346.0		6.31	106.5	3.1	0.42	0.0	0.00	0.13	0.04	5

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 207

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
38 40.1 N	125 18.2 W	10/05/87	0921 GMT	3552 M	330	21 KT			1018.5 MB	13.0 C	13.1 C	

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	6	13.80	13.80	32.774	24.509	341.7		6.16	104.2	3.8	0.42	0.0	0.00	0.16	0.05	6

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 209

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
38 32.2 N	125 11.8 W	10/05/87	1121 GMT	3703 M	330	20 KT			1017.2 MB	14.5 C	13.8 C	

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	13.99	13.99	32.892	24.561	336.6	0.000	6.15	104.6	4.3	0.41	0.1	0.00	0.28	0.05	0
1	2		13.99	13.99	32.892	24.561	336.6	0.007	6.15	104.6	4.3	0.41	0.1	0.00	0.28	0.05	2
	10	ISL	14.00	14.00	32.892	24.559	337.0	0.034	6.18	105.1	4.1	0.41	0.0	0.00	0.24	0.06	10
1	13		14.01	14.01	32.892	24.557	337.3	0.044	6.19	105.3	4.1	0.41	0.0	0.00	0.23	0.06	13
	20	ISL	13.61	13.61	32.858	24.613	332.2	0.067	6.22	104.9	4.4	0.42	0.0	0.00	0.24	0.06	20
1	23		13.43	13.43	32.843	24.638	329.8	0.077	6.23	104.7	4.5	0.42	0.0	0.00	0.25	0.06	23
	30	ISL	13.27	13.27	32.822	24.654	328.5	0.100	6.24	104.5	4.3	0.42	0.0	0.00	0.31	0.09	30
1	33		13.24	13.24	32.819	24.657	328.2	0.110	6.24	104.4	4.2	0.42	0.0	0.00	0.34	0.11	33
1	44		13.13	13.12	32.852	24.705	324.0	0.146	6.24	104.2	4.0	0.39	0.0		0.51	0.23	44
	50	ISL	12.99	12.98	32.922	24.787	316.3	0.165	6.25	104.1	4.3	0.40	0.0	0.00	0.66	0.32	50
1	54		12.86	12.85	32.965	24.846	310.8	0.178	6.25	103.8	4.5	0.40	0.0	0.00	0.74	0.36	54
1	65		12.34	12.33	32.960	24.943	301.8	0.211	6.04	99.2	5.2	0.51	1.2	0.24	0.62	0.33	66
1	75		11.92	11.91	33.016	25.066	290.4	0.241	5.81	94.6	6.4	0.66	4.0	0.03	0.45	0.30	76
1	90		11.37	11.36	33.304	25.391	259.8	0.282	4.93	79.5	12.1	1.08	11.4	0.00	0.11	0.19	91
	100	ISL	11.02	11.01	33.420	25.544	245.3	0.307	4.39	70.3	15.3	1.31	15.1	0.00	0.06	0.14	101
1	106		10.82	10.81	33.476	25.624	237.9	0.322	4.10	65.4	17.1	1.42	17.0	0.00	0.03	0.12	107
	125	ISL	10.18	10.17	33.674	25.889	213.0	0.365	3.39	53.4	22.0	1.68	21.6	0.00	0.01	0.11	126
1	126		10.15	10.14	33.683	25.901	211.9	0.367	3.36	52.9	22.2	1.69	21.8	0.00	0.01	0.11	127
	150	ISL	9.59	9.57	33.799	26.085	194.7	0.416	3.02	47.0	26.4	1.86	24.6	0.00	0.01	0.08	151
1	151		9.57	9.55	33.802	26.091	194.2	0.418	3.01	46.8	26.6	1.86	24.7	0.00	0.01	0.08	152
1	182		9.05	9.03	33.942	26.285	176.3	0.475	2.62	40.3	32.2	2.05	27.3	0.00			184
	200	ISL	8.79	8.77	33.987	26.362	169.3	0.506	2.55	39.0	34.5	2.10	28.2	0.00			202
1	212		8.63	8.61	34.008	26.403	165.5	0.526	2.53	38.5	35.8	2.12	28.6	0.00			214
1	242		8.23	8.21	34.045	26.493	157.3	0.575	2.45	37.0	39.1	2.20	29.7	0.00			244
	250	ISL	8.15	8.12	34.048	26.508	156.1	0.587	2.43	36.6	39.9	2.22	30.0	0.00			252
1	282		7.86	7.83	34.058	26.559	151.7	0.637	2.28	34.1	43.2	2.30	31.1	0.00			284
	300	ISL	7.73	7.70	34.080	26.595	148.5	0.664	2.07	30.9	45.9	2.39	32.0	0.00			303
1	337		7.44	7.41	34.125	26.673	141.5	0.717	1.62	24.0	51.8	2.57	33.9	0.00			340
1	398		6.78	6.74	34.132	26.770	132.8	0.801	1.29	18.8	60.3	2.76	36.5	0.00			402
	400	ISL	6.75	6.71	34.131	26.773	132.5	0.804	1.28	18.7	60.6	2.76	36.6	0.00			404
1	466		5.98	5.94	34.116	26.862	124.4	0.888	1.04	14.9	70.4	2.91	39.2	0.00			470
	500	ISL	5.82	5.78	34.147	26.906	120.4	0.930	0.85	12.1	74.8	3.01	40.2	0.00			505
1	541		5.63	5.58	34.186	26.961	115.6	0.978	0.62	8.8	80.2	3.12	41.4	0.00			546

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 211

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 22.1 N	125 5.3 W	10/05/87	1401 GMT	3824 M	330	18 KT	330 04 06	2	1017.2 MB	13.0 C	13.1 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	7	13.65	13.65	32.741	24.514	341.2		6.21	104.7	3.5	0.42	0.0	0.00	0.15	0.03	7

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 213

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 12.9 N	124 57.8 W	10/05/87	1555 GMT	3898 M	330	24 KT	340 05 05	2	1017.7 MB	13.0 C	13.0 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	6	13.64	13.64	32.730	24.508	341.8		6.19	104.4	3.7	0.42	0.1	0.00	0.18	0.03	6

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 215

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 3.3 N	124 51.4 W	10/05/87	1802 GMT	3926 M	330	20 KT	330 05 06	2	1017.5 MB	14.7 C	14.4 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	13.53	13.53	32.704	24.510	341.5	0.000	6.21	104.5	2.8	0.43	0.1	0.00	0.17	0.02	0
1	1	13.53	13.53	32.704	24.510	341.5	0.003	6.21	104.5	2.8	0.43	0.1	0.00	0.17	0.02	1
	10 ISL	13.54	13.54	32.705	24.509	341.8	0.034	6.27	105.5	2.7	0.43	0.1	0.00	0.17	0.04	10
1	11	13.54	13.54	32.705	24.509	341.8	0.038	6.28	105.7	2.7	0.43	0.1	0.00	0.17	0.04	11
	20 ISL	13.26	13.26	32.782	24.625	331.0	0.068	6.29	105.3	3.4	0.43	0.1	0.00	0.25	0.06	20
1	22	13.19	13.19	32.808	24.659	327.8	0.074	6.29	105.1	3.6	0.43	0.1	0.00	0.27	0.07	22
	30 ISL	12.98	12.98	32.942	24.804	314.2	0.100	6.28	104.6	4.2	0.42	0.1	0.00	0.56	0.15	30
1	32	12.94	12.94	32.972	24.835	311.3	0.106	6.27	104.3	4.3	0.42	0.1	0.00	0.64	0.17	32
1	43	12.85	12.84	32.979	24.859	309.3	0.141	6.24	103.6	4.3	0.43	0.1	0.00	0.95	0.29	43
	50 ISL	12.19	12.18	32.972	24.980	297.9	0.162	5.97	97.8	5.5	0.58	2.5	0.07	0.72	0.26	50
1	53	11.88	11.87	32.992	25.054	290.9	0.171	5.79	94.2	6.4	0.68	4.0	0.09	0.57	0.25	53
1	64	11.36	11.35	33.325	25.408	257.4	0.201	4.78	77.1	11.8	1.13	11.8	0.01	0.13	0.13	65
1	74	11.10	11.09	33.495	25.588	240.6	0.226	3.91	62.8	16.2	1.41	16.3	0.01	0.06	0.10	75
	75 ISL	11.08	11.07	33.504	25.598	239.6	0.228	3.86	61.9	16.5	1.43	16.6	0.01	0.06	0.10	76
1	90	10.88	10.87	33.584	25.697	230.6	0.263	3.49	55.8	18.8	1.58	18.7	0.01	0.03	0.09	91
	100 ISL	10.78	10.77	33.612	25.736	227.1	0.286	3.39	54.1	19.7	1.62	19.4	0.01	0.02	0.08	101
1	105	10.73	10.72	33.623	25.754	225.5	0.298	3.37	53.7	20.0	1.63	19.7	0.01	0.01	0.07	106
1	125	10.53	10.52	33.670	25.826	219.1	0.342	3.23	51.2	21.3	1.71	20.8	0.01	0.01	0.06	126
	150 ISL	10.33	10.31	33.727	25.905	212.1	0.396	3.01	47.6	22.9	1.80	22.0	0.01	0.01	0.05	151
1	151	10.32	10.30	33.729	25.908	211.8	0.398	3.00	47.4	23.0	1.80	22.1	0.01	0.01	0.05	152
1	182	9.96	9.94	33.815	26.037	200.1	0.462	2.81	44.1	26.0	1.93	24.1	0.01			184
	200 ISL	9.74	9.72	33.856	26.106	193.9	0.497	2.69	42.0	27.8	1.99	25.1	0.01			202
1	212	9.56	9.54	33.884	26.158	189.1	0.520	2.62	40.7	29.2	2.02	25.7	0.01			214
1	242	8.87	8.84	33.971	26.337	172.5	0.575	2.52	38.6	33.7	2.12	27.6	0.01			244
	250 ISL	8.77	8.74	33.987	26.365	169.9	0.588	2.50	38.2	34.6	2.14	27.9	0.01			252
1	283	8.45	8.42	34.037	26.454	161.9	0.643	2.37	36.0	38.2	2.23	29.2	0.01			285
	300 ISL	8.17	8.14	34.055	26.511	156.7	0.670	2.26	34.1	41.1	2.30	30.2	0.01			303
1	338	7.53	7.50	34.083	26.627	145.9	0.728	1.99	29.6	48.1	2.46	32.5	0.00			341
1	399	6.89	6.85	34.100	26.730	136.7	0.814	1.56	22.8	57.0	2.69	35.5	0.01			403
	400 ISL	6.88	6.84	34.100	26.731	136.6	0.815	1.55	22.7	57.2	2.69	35.5	0.01			404
1	465	6.33	6.29	34.135	26.832	127.5	0.901	1.06	15.3	67.7	2.90	38.6	0.01			469
	500 ISL	6.01	5.97	34.150	26.885	122.6	0.945	0.88	12.6	73.3	3.01	39.9	0.01			505
1	537	5.67	5.62	34.167	26.941	117.5	0.989	0.68	9.7	79.3	3.13	41.3	0.00			542

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 217

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
37 53.6 N	124 44.4 W	10/05/87	2126 GMT	4000 M	320	20 KT	320 08 06	2	1015.2 MB	13.9 C	12.8 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	6	13.46	13.46	32.616	24.456	346.7		6.22	104.4	2.3	0.45	0.1	0.00	0.17	0.03	6

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 219

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
37 43.9 N	124 38.3 W	10/05/87	2314 GMT	3795 M	340	24 KT		2	1014.8 MB	14.6 C	13.2 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	7	13.23	13.23	32.580	24.474	345.1		6.27	104.7	2.7	0.42	0.1	0.01	0.20	0.03	7

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 221

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
37 34.3 N	124 32.0 W	11/05/87	0121 GMT	3976 M	330	20 KT	330 08 06	2	1015.4 MB	14.8 C	14.1 C	8/8	ST

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	13.43	13.43	32.680	24.511	341.3	0.000	6.22	104.4	2.8	0.43	0.1	0.00	0.24	0.05	0
1	1		13.43	13.43	32.680	24.511	341.3	0.003	6.22	104.4	2.8	0.43	0.1	0.00	0.24	0.05	1
	10	ISL	13.41	13.41	32.679	24.515	341.2	0.034	6.25	104.9	2.8	0.43	0.1	0.00	0.23	0.06	10
1	16		13.40	13.40	32.678	24.516	341.2	0.055	6.27	105.2	2.8	0.43	0.1	0.00	0.23	0.06	16
	20	ISL	13.31	13.31	32.662	24.522	340.8	0.068	6.28	105.1	2.8	0.43	0.1	0.00	0.24	0.06	20
	30	ISL	13.10	13.10	32.653	24.557	337.7	0.102	6.30	105.0	3.0	0.43	0.1	0.00	0.28	0.06	30
1	31		13.08	13.08	32.655	24.562	337.2	0.106	6.30	105.0	3.0	0.43	0.1	0.00	0.28	0.06	31
1	42		12.19	12.18	32.574	24.671	327.1	0.142	6.46	105.6	3.1	0.46	0.1	0.00	0.46	0.20	42
	50	ISL	12.47	12.46	32.744	24.750	319.8	0.168	6.35	104.5	3.6	0.44	0.1	0.00	0.65	0.25	50
1	52		12.58	12.57	32.795	24.769	318.1	0.174	6.31	104.1	3.8	0.44	0.1	0.00	0.70	0.27	52
1	62		12.63	12.62	32.893	24.835	312.1	0.206	6.19	102.3	4.3	0.46	0.1	0.08	0.89	0.42	62
1	72		12.07	12.06	32.950	24.986	297.8	0.236	5.88	96.0	5.6	0.64	3.1	0.04	0.33	0.22	73
	75	ISL	11.87	11.86	32.990	25.055	291.4	0.245	5.80	94.4	6.3	0.71	4.2	0.03	0.26	0.20	76
1	82		11.39	11.38	33.090	25.221	275.7	0.265	5.58	89.9	8.3	0.87	7.0	0.02	0.17	0.17	83
1	98		10.32	10.31	33.211	25.503	249.1	0.307	4.88	76.9	14.2	1.27	13.7	0.01	0.05	0.11	99
	100	ISL	10.24	10.23	33.255	25.551	244.5	0.312	4.73	74.4	15.2	1.33	14.7	0.01	0.04	0.11	101
1	113		9.90	9.89	33.546	25.836	217.7	0.342	3.80	59.4	20.9	1.64	20.2	0.01	0.02	0.10	114
	125	ISL	9.91	9.90	33.686	25.944	207.7	0.368	3.37	52.7	23.1	1.77	22.0	0.01	0.02	0.11	126
1	129		9.92	9.91	33.715	25.965	205.8	0.376	3.28	51.4	23.6	1.80	22.3	0.01	0.02	0.11	130
	150	ISL	9.29	9.27	33.827	26.156	187.9	0.417	3.04	47.0	28.0	1.96	25.1	0.01	0.01	0.09	151
1	154		9.14	9.12	33.840	26.190	184.7	0.425	3.02	46.5	28.8	1.99	25.6	0.01	0.01	0.09	155
1	180		8.73	8.71	33.930	26.326	172.3	0.471	2.83	43.2	33.0	2.10	27.2	0.01			181
	200	ISL	8.54	8.52	33.996	26.407	164.9	0.505	2.59	39.4	36.0	2.19	28.4	0.01			202
1	211		8.45	8.43	34.025	26.444	161.6	0.523	2.48	37.6	37.5	2.23	29.0	0.01			213
1	242		8.12	8.10	34.050	26.514	155.4	0.572	2.43	36.6	40.0	2.30	29.9	0.01			244
	250	ISL	8.02	7.99	34.054	26.532	153.7	0.584	2.39	35.9	41.1	2.33	30.3	0.01			252
1	284		7.60	7.57	34.072	26.607	146.9	0.635	2.15	32.0	46.3	2.45	32.0	0.01			286
	300	ISL	7.43	7.40	34.082	26.640	144.0	0.659	2.01	29.8	48.9	2.51	32.9	0.01			303
1	342		6.99	6.96	34.100	26.716	137.2	0.718	1.66	24.4	55.8	2.68	35.1	0.01			345
	400	ISL	6.30	6.26	34.093	26.802	129.4	0.795	1.36	19.6	65.0	2.85	37.9	0.01			404
1	403		6.27	6.23	34.093	26.806	129.0	0.799	1.35	19.5	65.5	2.86	38.0	0.01			407
1	469		5.65	5.61	34.121	26.906	119.8	0.881	0.95	13.5	77.4	3.05	40.6	0.01			473
	500	ISL	5.51	5.47	34.152	26.948	116.1	0.917	0.77	10.9	81.3	3.13	41.3	0.01			505
1	540		5.34	5.30	34.192	27.000	111.5	0.963	0.54	7.6	86.4	3.23	42.3	0.00			545

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 223

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
37 24.4 N	124 24.5 W	11/05/87	0358 GMT	4017 M	330	22 KT		2	1016.0 MB	12.2 C	12.0 C	8/8	ST

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	11		13.25	13.25	32.599	24.485	344.1		6.24	104.3	2.7	0.44	0.1	0.00	0.20	0.03	11

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 224

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
37 11.8 N	124 39.0 W	11/05/87	0646 GMT	4129 M	330	25 KT	330 08 06	2	1016.3 MB	15.5 C	13.4 C	8/8	ST

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	13.14	13.14	32.585	24.495	342.8	0.000	6.27	104.5	2.3	0.43	0.0	0.00	0.15	0.04	0
1	1		13.14	13.14	32.585	24.495	342.9	0.003	6.27	104.5	2.3	0.43	0.0	0.00	0.15	0.04	1
	10	ISL	13.15	13.15	32.576	24.487	343.9	0.034	6.29	104.9	2.2	0.46	0.0	0.00	0.15	0.04	10
1	11		13.15	13.15	32.575	24.486	344.0	0.038	6.29	104.9	2.2	0.46	0.0	0.00	0.15	0.04	11
	20	ISL	13.14	13.14	32.577	24.490	343.9	0.069	6.28	104.7	2.3	0.44	0.0	0.00	0.13	0.04	20
1	22		13.14	13.14	32.577	24.490	343.9	0.076	6.28	104.7	2.4	0.43	0.0	0.00	0.13	0.04	22
	30	ISL	12.49	12.49	32.562	24.605	333.1	0.103	6.49	106.7	2.8	0.44	0.0	0.00	0.19	0.07	30
1	32		12.31	12.31	32.559	24.637	330.1	0.109	6.54	107.1	2.9	0.45	0.0	0.00	0.21	0.08	32
1	42		11.82	11.81	32.565	24.733	321.1	0.142	6.56	106.3	3.5	0.46	0.0	0.00	0.34	0.18	42
	50	ISL	11.52	11.51	32.578	24.798	315.1	0.167	6.53	105.2	3.8	0.51	0.3	0.10	0.61	0.28	50
1	52		11.47	11.46	32.583	24.812	313.9	0.174	6.52	104.9	3.9	0.53	0.4	0.14	0.66	0.30	52
1	62		11.43	11.42	32.630	24.855	310.0	0.205	6.32	101.6	5.0	0.61	1.9	0.47	0.52	0.25	62
1	72		11.83	11.82	32.965	25.043	292.4	0.235	5.85	95.1	6.2	0.69	4.0	0.02	0.21	0.21	73
	75	ISL	11.77	11.76	33.009	25.088	288.2	0.244	5.77	93.7	6.6	0.73	4.7	0.02	0.19	0.19	76
1	88		11.22	11.21				0.280	5.49	88.2	9.1	0.93	8.0	0.01	0.10	0.12	89
	100	ISL	10.76	10.75	33.208	25.425	256.6	0.311	5.04	80.1	12.2	1.15	11.9	0.01	0.05	0.08	101
1	103		10.64	10.63	33.213	25.450	254.3	0.319	4.91	77.9	13.1	1.21	13.0	0.01	0.04	0.08	104
1	123		9.64	9.63	33.516	25.855	216.0	0.366	3.98	61.8	21.1	1.67	20.9	0.01	0.02	0.10	124
	125	ISL	9.59	9.58	33.537	25.880	213.6	0.370	3.91	60.7	21.7	1.70	21.3	0.01	0.02	0.10	126
1	148		9.22	9.20	33.735	26.095	193.6	0.417	3.24	49.9	26.7	1.89	24.5	0.01	0.01	0.09	149
	150	ISL	9.20	9.18	33.752	26.112	192.1	0.421	3.19	49.2	27.1	1.91	24.8	0.01			151
1	178		8.98	8.96	33.946	26.299	174.8	0.472	2.61	40.1	31.9	2.10	27.6	0.01			179
	200	ISL	8.64	8.62	34.024	26.414	164.3	0.510	2.52	38.4	35.8	2.19	28.9	0.01			202
1	210		8.46	8.44	34.043	26.457	160.3	0.526	2.48	37.6	37.5	2.22	29.3	0.01			212
1	239		7.99	7.97	34.056	26.538	153.0	0.571	2.46	36.9	41.3	2.31	30.6	0.01			241
	250	ISL	7.84	7.82	34.062	26.564	150.5	0.588	2.38	35.6	42.9	2.35	31.1	0.01			252
1	280		7.48	7.45	34.077	26.629	144.8	0.632	2.07	30.7	47.7	2.46	32.6	0.01			282
	300	ISL	7.23	7.20	34.084	26.669	141.1	0.661	1.88	27.7	51.1	2.54	33.7	0.01			303
1	335		6.84	6.81	34.095	26.732	135.5	0.709	1.57	23.0	57.0	2.69	35.7	0.01			338
1	397		6.34	6.30	34.123	26.821	127.6	0.791	1.09	15.8	66.6	2.90	38.5	0.00			400
	400	ISL	6.31	6.27	34.125	26.826	127.1	0.795	1.07	15.5	67.1	2.91	38.6	0.00			404
1	464		5.76	5.72	34.161	26.925	118.2	0.873	0.74	10.5	76.7	3.08	40.7	0.00			468
	500	ISL	5.54	5.50	34.179	26.966	114.5	0.915	0.63	8.9	81.9	3.14	41.5	0.00			504
1	539		5.31	5.27	34.199	27.009	110.6	0.959	0.52	7.3	87.6	3.20	42.4	0.00			544

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 226

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
37 22.1 N	124 45.6 W	11/05/87	0942 GMT	4159 M	330	25 KT			1015.2 MB	13.0 C	12.9 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	11	13.19	13.19	32.548	24.457	346.8		6.25	104.3	2.7	0.43	0.1	0.00	0.15	0.03	11

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 228

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
37 31.0 N	124 52.4 W	11/05/87	1137 GMT	4129 M	320	23 KT		1	1014.8 MB	12.7 C	11.8 C	6/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	11	13.26	13.26	32.591	24.477	344.9		6.21	103.8	2.8	0.48	0.1	0.00	0.14	0.03	11

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 230

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
37 41.1 N	124 59.0 W	11/05/87	1348 GMT	4119 M	320	25 KT	320 08 07	1	1014.9 MB	13.0 C	12.9 C	5/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	13.17	13.17	32.593	24.496	342.8	0.000	6.22	103.8	2.5	0.46	0.0	0.00	0.14	0.03	0
1	2	13.17	13.17	32.593	24.496	342.8	0.007	6.22	103.8	2.5	0.46	0.0	0.00	0.14	0.03	2
	10 ISL	13.19	13.19	32.596	24.494	343.1	0.034	6.25	104.3	2.5	0.45	0.0	0.00	0.13	0.04	10
1	12	13.19	13.19	32.597	24.495	343.1	0.041	6.26	104.5	2.5	0.45	0.0	0.00	0.13	0.04	12
	20 ISL	13.20	13.20	32.604	24.499	343.0	0.069	6.23	104.0	2.6	0.45	0.0	0.00	0.13	0.03	20
1	23	13.20	13.20	32.606	24.500	342.9	0.079	6.23	104.0	2.6	0.45	0.0	0.00	0.13	0.03	23
	30 ISL	13.12	13.12	32.705	24.593	334.3	0.103	6.30	105.1	3.0	0.44	0.0	0.00	0.18	0.06	30
1	33	13.08	13.08	32.758	24.642	329.7	0.113	6.34	105.7	3.2	0.44	0.0	0.00	0.21	0.07	33
1	44	12.42	12.41	32.764	24.775	317.3	0.148	6.41	105.4	3.4	0.45	0.0	0.00	0.27	0.12	44
	50 ISL	12.41	12.40	32.802	24.807	314.4	0.167	6.36	104.6	3.6	0.45	0.0	0.02	0.55	0.18	50
1	54	12.40	12.39	32.826	24.827	312.5	0.180	6.33	104.1	3.8	0.45	0.0	0.04	0.72	0.21	54
1	64	12.19	12.18	32.919	24.939	302.2	0.210	5.99	98.1	4.9	0.39	1.8	0.18	0.58	0.22	65
1	75	11.01	11.00	32.804	25.066	290.2	0.243	5.79	92.4	7.8	0.82	5.9	0.04	0.26	0.14	76
1	90	11.08	11.07				0.285	5.09	81.4	11.2	1.10	10.6	0.02	0.08	0.12	91
	100 ISL	10.79	10.78	33.293	25.486	250.8	0.312	4.56	72.6	14.3	1.29	14.2	0.01	0.05	0.11	101
1	106	10.57	10.56	33.420	25.623	237.8	0.326	4.26	67.5	16.2	1.40	16.3	0.01	0.04	0.11	107
	125 ISL	10.03	10.02	33.648	25.894	212.4	0.369	3.57	56.0	21.4	1.69	21.3	0.01	0.02	0.10	126
1	126	10.01	10.00	33.657	25.904	211.5	0.371	3.54	55.5	21.6	1.70	21.5	0.01	0.02	0.10	127
	150 ISL	9.59	9.57	33.788	26.077	195.5	0.420	3.12	48.5	25.9	1.87	24.4	0.01	0.01	0.07	151
1	152	9.56	9.54	33.795	26.087	194.6	0.424	3.10	48.2	26.2	1.88	24.5	0.01	0.01	0.07	153
1	182	9.02	9.00	33.939	26.287	176.0	0.480	2.68	41.2	31.1	2.07	27.1	0.00			184
	200 ISL	8.78	8.76	33.983	26.360	169.4	0.511	2.62	40.0	33.5	2.12	28.0	0.00			202
1	213	8.61	8.59	34.003	26.402	165.6	0.532	2.60	39.6	35.1	2.14	28.5	0.00			215
1	243	8.17	8.15	34.046	26.503	156.4	0.581	2.41	36.3	39.1	2.24	29.7	0.00			245
	250 ISL	8.09	8.06	34.053	26.521	154.8	0.592	2.39	36.0	40.0	2.26	30.0	0.00			252
1	284	7.77	7.74	34.078	26.588	148.9	0.643	2.29	34.2	44.3	2.35	31.5	0.00			286
	300 ISL	7.60	7.57	34.087	26.620	146.1	0.667	2.12	31.5	46.8	2.42	32.4	0.00			303
1	340	7.20	7.17	34.110	26.695	139.4	0.724	1.62	23.9	53.2	2.61	34.6	0.00			343
	400 ISL	6.75	6.71	34.154	26.791	130.8	0.805	1.11	16.2	61.9	2.81	37.1	0.00			404
1	402	6.74	6.70	34.155	26.793	130.7	0.808	1.10	16.0	62.2	2.82	37.2	0.00			406
1	469	6.04	6.00	34.163	26.892	121.7	0.892	0.79	11.3	72.6	2.99	40.0	0.00			473
	500 ISL	5.78	5.74	34.171	26.930	118.1	0.929	0.70	10.0	77.1	3.05	40.9	0.00			505
1	543	5.43	5.38	34.182	26.982	113.4	0.979	0.58	8.2	83.3	3.14	42.1	0.00			548

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 232

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
37 50.8 N	125 4.0 W	11/05/87	1620 GMT	4089 M	330	22 KT		2	1016.5 MB	12.8 C	12.2 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	12	13.22	13.22	32.626	24.512	341.6		6.25	104.4	2.5	0.43	0.0	0.00	0.17	0.04	12

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 234

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 0.6 N	125 11.7 W	11/05/87	1824 GMT	4038 M	330	20 KT		1	1015.4 MB	13.3 C	12.8 C	5/8	CC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	12	13.40	13.40	32.654	24.498	342.9		6.23	104.5	2.8	0.45	0.0	0.01	0.20	0.04	12

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 236

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 9.8 N	125 19.3 W	11/05/87	2109 GMT	3932 M	320	20 KT	320 08 06	1	1015.2 MB	17.2 C	16.3 C	2/8	CS

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	13.58	13.58	32.625	24.438	348.2	0.000	6.24	105.0	2.9	0.43	0.0	0.00	0.14	0.03	0
1	1		13.58	13.58	32.625	24.438	348.3	0.003	6.24	105.0	2.9	0.43	0.0	0.00	0.14	0.03	1
	10	ISL	13.56	13.56	32.624	24.442	348.1	0.035	6.26	105.3	3.0	0.44	0.0	0.00	0.14	0.03	10
1	13		13.55	13.55	32.624	24.444	348.1	0.045	6.27	105.5	3.0	0.44	0.0	0.00	0.14	0.03	13
	20	ISL	13.49	13.49	32.628	24.459	346.8	0.070	6.26	105.2	3.1	0.44	0.0	0.00	0.18	0.03	20
1	22		13.47	13.47	32.629	24.464	346.4	0.077	6.26	105.1	3.1	0.44	0.0	0.00	0.19	0.03	22
	30	ISL	13.87	13.87	32.876	24.574	336.1	0.104	6.18	104.8	3.1	0.42	0.0	0.00	0.18	0.05	30
1	32		13.98	13.98	32.943	24.604	333.4	0.111	6.16	104.7	3.1	0.41	0.0	0.00	0.17	0.05	32
1	43		14.03	14.02	33.016	24.650	329.3	0.147	6.11	104.0	3.2	0.40	0.0	0.00	0.21	0.07	43
	50	ISL	13.52	13.51	32.993	24.737	321.2	0.170	6.22	104.8	3.3	0.40	0.0	0.00	0.35	0.14	50
1	53		13.28	13.27	32.981	24.776	317.5	0.179	6.27	105.1	3.4	0.40	0.0	0.00	0.42	0.18	53
1	65		12.97	12.96	33.014	24.863	309.5	0.217	6.24	103.9	4.0	0.43	0.0	0.04	0.74	0.27	66
1	74		12.59	12.58	33.094	24.999	296.7	0.244	5.87	97.0	4.9	0.57	1.8	0.18	0.69	0.39	75
	75	ISL	12.52	12.51	33.102	25.019	294.9	0.247	5.82	96.1	5.1	0.59	2.2	0.18	0.66	0.39	76
1	89		11.43	11.42	33.216	25.312	267.2	0.287	5.12	82.6	8.8	0.95	9.1	0.04	0.24	0.26	90
	100	ISL	10.63	10.62	33.307	25.525	247.1	0.315	4.69	74.4	12.5	1.19	13.4	0.03	0.09	0.15	101
1	105		10.31	10.30	33.351	25.614	238.6	0.327	4.52	71.2	14.2	1.28	15.0	0.02	0.06	0.10	106
	125	ISL	9.55	9.54	33.561	25.906	211.2	0.372	4.02	62.4	19.7	1.54	19.7	0.01	0.01	0.05	126
1	126		9.53	9.52	33.571	25.917	210.2	0.374	4.00	62.0	20.0	1.55	19.9	0.01	0.01	0.05	127
	150	ISL	9.07	9.05	33.762	26.140	189.3	0.422	3.36	51.6	26.8	1.82	24.6	0.01	0.01	0.03	151
1	152		9.04	9.02	33.775	26.155	187.9	0.426	3.32	51.0	27.3	1.84	24.9	0.01	0.01	0.03	153
1	183		8.48	8.46	33.896	26.338	171.1	0.481	3.31	50.2	31.3	1.90	26.1	0.02			185
	200	ISL	8.42	8.40	33.953	26.392	166.2	0.510	3.03	45.9	33.5	2.00	27.3	0.01			202
1	214		8.35	8.33	33.985	26.428	163.1	0.533	2.88	43.6	35.1	2.05	28.1	0.00			216
1	245		7.65	7.63	33.979	26.527	153.9	0.582	3.51	52.3	37.5	1.90	27.1	0.01			247
	250	ISL	7.56	7.54	33.979	26.540	152.7	0.590	3.48	51.7	38.4	1.92	27.4	0.01			252
1	285		7.06	7.03	33.987	26.616	145.8	0.642	2.92	42.9	45.8	2.16	30.8	0.01			287
	300	ISL	6.87	6.84	33.989	26.644	143.2	0.664	2.74	40.1	48.6	2.24	32.0	0.01			303
1	341		6.46	6.43	34.002	26.709	137.4	0.721	2.28	33.0	55.4	2.43	34.8	0.01			344
	400	ISL	6.13	6.09	34.055	26.794	130.0	0.800	1.59	22.9	63.8	2.68	37.8	0.00			404
1	403		6.12	6.08	34.059	26.798	129.6	0.804	1.56	22.4	64.2	2.69	37.9	0.00			407
1	468		5.94	5.90	34.149	26.893	121.4	0.886	0.83	11.9	73.8	2.98	40.6	0.01			472
	500	ISL	5.75	5.71	34.168	26.932	117.9	0.924	0.71	10.1	78.0	3.03	41.4	0.01			505
1	540		5.51	5.46	34.192	26.980	113.6	0.970	0.56	7.9	83.3	3.09	42.4	0.00			545

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 238

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 19.2 N	125 25.7 W	11/05/87	2337 GMT	3754 M	320	21 KT		1	1015.2 MB	14.8 C	13.5 C	5/8	CC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	12	14.04	14.04	32.815	24.492	343.5		6.08	103.4	3.2	0.40	0.0	0.00	0.12	0.02	12

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 240

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 28.4 N	125 32.3 W	12/05/87	0131 GMT	3880 M	340	22 KT		1	1014.6 MB	15.0 C	14.4 C	6/8	CU

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	12	14.15	14.15	32.858	24.502	342.5		6.11	104.2	3.2	0.39	0.0	0.00	0.11	0.02	12

RV NEW HORIZON CRUISE SQ87 LEG I STATION G 242

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 38.1 N	125 39.7 W	12/05/87	0346 GMT	3998 M	330	16 KT	330 08 06	2	1015.1 MB	17.5 C	15.2 C	8/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	13.98	13.98	32.829	24.514	341.0	0.000	6.13	104.2	3.3	0.40	0.0		0.13	0.03	0
1	1		13.98	13.98	32.829	24.515	341.0	0.003	6.13	104.2	3.3	0.40	0.0		0.13	0.03	1
	10	ISL	13.97	13.97	32.832	24.519	340.8	0.034	6.14	104.3	3.3	0.41	0.0		0.13	0.04	10
1	11		13.97	13.97	32.832	24.519	340.8	0.038	6.14	104.3	3.3	0.41	0.0		0.13	0.04	11
	20	ISL	13.98	13.98	32.835	24.520	341.1	0.068	6.15	104.5	3.5	0.41	0.0		0.12	0.03	20
1	21		13.98	13.98	32.835	24.520	341.1	0.072	6.15	104.5	3.5	0.41	0.0	0.00	0.12	0.03	21
	30	ISL	14.01	14.01	33.008	24.647	329.2	0.102	6.17	105.0	3.6	0.39	0.0	0.00	0.15	0.05	30
1	31		14.01	14.01	33.029	24.664	327.7	0.105	6.17	105.0	3.6	0.39	0.0	0.00	0.16	0.05	31
1	41		13.71	13.70	33.007	24.708	323.7	0.138	6.19	104.7	3.6	0.39	0.0	0.00	0.27	0.09	41
	50	ISL	13.44	13.43	33.023	24.776	317.5	0.166	6.25	105.1	3.6	0.40	0.0	0.00	0.86	0.31	50
1	51		13.41	13.40				0.170	6.25	105.1	3.6	0.40	0.0	0.00			51
1	61		12.95	12.94	33.068	24.908	305.1	0.201	6.13	102.1	4.3	0.46	0.1	0.06	1.30	0.52	61
1	71		12.43	12.42	33.118	25.048	292.0	0.231	5.77	95.1	5.5	0.62	2.7	0.06	0.66	0.37	72
	75	ISL	12.18	12.17	33.162	25.130	284.3	0.242	5.59	91.6	6.3	0.71	4.3	0.06	0.50	0.31	76
1	86		11.37	11.36	33.279	25.371	261.5	0.272	5.09	82.1	9.6	1.00	9.3	0.06	0.22	0.16	87
1	100		10.00	9.99	33.325	25.646	235.5	0.307	4.59	71.8	15.5	1.35	15.1	0.01	0.09	0.11	101
1	120		9.96	9.95	33.627	25.889	212.8	0.352	3.55	55.6	21.3	1.68	21.1	0.00	0.02	0.09	121
	125	ISL	9.89	9.88	33.671	25.935	208.5	0.362	3.47	54.3	22.4	1.74	22.1	0.00	0.02	0.09	126
1	145		9.46	9.44	33.768	26.083	194.9	0.403	3.14	48.7	26.0	1.91	24.6	0.00	0.01	0.08	146
	150	ISL	9.28	9.26	33.770	26.113	192.0	0.412	3.22	49.7	26.6	1.90	24.7	0.00			151
1	174		8.49	8.47	33.789	26.252	179.0	0.457	3.56	54.0	29.2	1.86	24.9	0.00			175
	200	ISL	8.39	8.37	33.961	26.403	165.2	0.502	3.02	45.7	33.8	2.04	27.2	0.00			202
1	203		8.38	8.36	33.978	26.417	163.9	0.506	2.94	44.5	34.3	2.06	27.5	0.00			205
1	232		7.94	7.92	34.017	26.514	155.1	0.553	2.87	43.0	38.4	2.14	28.6	0.00			234
	250	ISL	7.73	7.71	34.041	26.564	150.5	0.580	2.58	38.5	41.9	2.26	30.1	0.00			252
1	271		7.52	7.49	34.063	26.612	146.3	0.611	2.19	32.5	46.2	2.41	32.1	0.00			273
	300	ISL	7.19	7.16	34.077	26.669	141.1	0.653	1.89	27.9	51.2	2.54	34.0	0.00			303
1	325		6.92	6.89	34.085	26.713	137.1	0.688	1.69	24.8	55.2	2.64	35.3	0.00			328
1	385		6.42	6.39	34.122	26.809	128.6	0.768	1.15	16.6	63.8	2.89	38.2	0.00			388
	400	ISL	6.19	6.15	34.107	26.827	126.9	0.787	1.16	16.7	66.3	2.91	38.8	0.00			404
1	451		5.41	5.37	34.059	26.886	121.2	0.850	1.21	17.1	75.1	2.97	40.7	0.00			455
	500	ISL	5.08	5.04	34.093	26.952	115.3	0.908	0.92	12.9	83.6	3.11	42.4	0.00			505
1	521		4.94	4.90	34.108	26.979	112.7	0.932	0.79	11.0	87.2	3.17	43.1	0.00			526

RV NEW HORIZON — CRUISE SQ87 LEG I — STATION G 244

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 46.2 N	125 45.5 W	12/05/87	0613 GMT	4028 M	330	12 KT		2	1017.6 MB	13.9 C	13.9 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	11	13.84	13.84	32.766	24.495	343.2		6.17	104.5	3.4	0.40	0.0	0.00	0.13	0.04	11

RV NEW HORIZON — CRUISE SQ87 LEG I — STATION G 246

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 54.8 N	125 51.5 W	12/05/87	0800 GMT	3986 M	310	15 KT		4	1017.5 MB	14.5 C	15.0 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	9	13.60	13.60	32.693	24.487	343.8		6.19	104.3	2.6	0.42	0.0	0.00	0.16	0.03	9

RV NEW HORIZON — CRUISE SQ87 LEG I — STATION G 248

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
39 4.0 N	125 58.2 W	12/05/87	1000 GMT	3952 M	310	17 KT		4	1017.2 MB	15.0 C	15.0 C		

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	13.73	13.73	32.647	24.425	349.5	0.000	6.16	104.0	2.7	0.46	0.0	0.00	0.13	0.03	0
1	1		13.73	13.73	32.647	24.425	349.5	0.003	6.16	104.0	2.7	0.46	0.0	0.00	0.13	0.03	1
	10	ISL	13.74	13.74	32.646	24.423	350.0	0.035	6.20	104.7	2.7	0.46	0.0	0.00	0.12	0.04	10
1	11		13.74	13.74	32.646	24.423	350.0	0.038	6.20	104.7	2.7	0.46	0.0	0.00	0.12	0.04	11
	20	ISL	13.68	13.68	32.651	24.439	348.7	0.070	6.19	104.4	2.7	0.45	0.0	0.00	0.11	0.03	20
1	22		13.67	13.67	32.652	24.442	348.5	0.077	6.19	104.4	2.7	0.45	0.0	0.00	0.11	0.03	22
	30	ISL	13.40	13.40	32.667	24.508	342.4	0.105	6.24	104.7	2.7	0.46	0.0	0.00	0.21	0.03	30
1	32		13.32	13.32	32.672	24.528	340.6	0.111	6.26	104.8	2.7	0.46	0.0	0.00	0.23	0.03	32
1	43		12.93	12.92	32.693	24.622	331.9	0.148	6.31	104.8	2.9	0.46	0.0	0.00	0.18	0.07	43
	50	ISL	12.54	12.53	32.689	24.694	325.2	0.171	6.39	105.3	3.0	0.46	0.0	0.00	0.28	0.10	50
1	53		12.34	12.33	32.692	24.735	321.4	0.181	6.40	105.0	3.0	0.46	0.0	0.00	0.32	0.12	53
1	63		11.58	11.57	32.762	24.931	302.8	0.212	6.20	100.1	5.3	0.62	1.7	0.37	0.85	0.29	64
1	74		11.61	11.60	32.868	25.008	295.8	0.245	6.02	97.3	5.9	0.66	3.0	0.02	0.31	0.29	75
	75	ISL	11.58	11.57	32.872	25.017	295.0	0.248	6.00	96.9	6.1	0.67	3.2	0.02	0.30	0.28	76
1	89		10.93	10.92	32.958	25.200	277.7	0.288	5.51	87.8	9.7	0.94	7.9	0.01	0.14	0.14	90
	100	ISL	10.34	10.33	33.149	25.452	254.0	0.317	4.90	77.2	14.2	1.24	13.1	0.01	0.07	0.13	101
1	105		10.10	10.09	33.248	25.570	242.8	0.330	4.61	72.3	16.3	1.38	15.4	0.01	0.05	0.12	106
1	125		9.67	9.66	33.548	25.876	214.1	0.376	3.68	57.2	22.8	1.70	21.3	0.01	0.02	0.10	126
	150	ISL	9.46	9.44	33.742	26.062	196.9	0.427	3.05	47.3	27.6	1.92	24.8	0.01	0.00	0.09	151
1	151		9.45	9.43	33.747	26.068	196.4	0.429	3.04	47.1	27.8	1.93	24.9	0.01	0.00	0.09	152
1	182		8.79	8.77	33.896	26.290	175.7	0.487	2.82	43.1	33.2	2.08	27.5	0.01			184
	200	ISL	8.58	8.56	33.950	26.365	168.8	0.518	2.72	41.4	35.6	2.13	28.4	0.01			202
1	213		8.46	8.44	33.977	26.405	165.3	0.539	2.68	40.7	37.0	2.15	28.8	0.01			215
1	244		8.05	8.03	34.011	26.493	157.3	0.589	2.73	41.0	39.6	2.16	29.1	0.01			246
	250	ISL	7.97	7.94	34.016	26.509	155.8	0.599	2.69	40.4	40.5	2.18	29.4	0.01			252
1	285		7.55	7.52	34.040	26.590	148.6	0.652	2.41	35.8	46.0	2.33	31.3	0.01			287
	300	ISL	7.41	7.38	34.046	26.614	146.5	0.674	2.32	34.4	47.9	2.38	32.0	0.01			303
1	341		7.05	7.02	34.055	26.672	141.4	0.733	2.08	30.6	53.2	2.51	34.0	0.00			344
	400	ISL	6.38	6.34	34.065	26.770	132.5	0.814	1.59	23.0	63.6	2.72	37.3	0.00			404
1	403		6.35	6.31	34.066	26.775	132.1	0.818	1.56	22.5	64.1	2.73	37.5	0.00			407
1	470		5.86	5.82	34.116	26.877	122.9	0.903	1.02	14.6	74.2	3.00	40.5	0.00			474
	500	ISL	5.68	5.64	34.139	26.917	119.2	0.940	0.85	12.1	79.0	3.07	41.5	0.00			505
1	542		5.42	5.37	34.173	26.976	114.0	0.989	0.62	8.8	85.7	3.17	42.9	0.00			547

RV NEW HORIZON — CRUISE SQ87 LEG I — STATION G 250

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
39 13.7 N	126 4.4 W	12/05/87	1244 GMT	3986 M	320	13 KT		2	1016.9 MB	13.9 C	13.2 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	11	13.90	13.90	32.761	24.479	344.7		6.21	105.3	2.9	0.42	0.0	0.00	0.22	0.04	11

RV NEW HORIZON — CRUISE SQ87 LEG II — STATION N 12

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 50.7 N	124 26.9 W	15/05/87	1000 GMT	3460 M	330	27 KT			1015.2 MB	13.7 C	13.7 C		

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	0		13.483	13.483	32.532	D 24.386	353.2	0.000									0
2	4		13.484	13.483	32.533	24.387	353.2	0.014	6.20	104.1	1.8	0.39	0.0	0.00	0.15	0.02	4
	10	ISL	13.488	13.487	32.533	24.386	353.5	0.035	6.19	103.9	1.8	0.39	0.0	0.00	0.17	0.01	10
2	11		13.489	13.487	32.533	24.386	353.5	0.039	6.19	103.9	1.8	0.39	0.0	0.00	0.17	0.01	11
	20	ISL	13.459	13.456	32.554	24.409	351.6	0.071	6.20	104.0	1.8	0.39	0.0	0.00	0.14	0.02	20
2	21		13.456	13.453	32.556	24.411	351.4	0.074	6.20	104.0	1.8	0.39	0.0	0.00	0.14	0.02	21
	30	ISL	12.479	12.475	32.644	24.670	326.9	0.105	6.37	104.8	2.3	0.41	0.0	0.00	0.16	0.05	30
2	31		12.354	12.350	32.656	24.704	323.8	0.108	6.39	104.8	2.4	0.42	0.0	0.00	0.16	0.05	31
2	41		11.677	11.672	32.761	24.912	304.1	0.139	6.43	104.0	4.9	0.52	0.5	0.16	1.29	0.43	41
	50	ISL	11.462	11.456	32.828	25.003	295.6	0.166	6.15	99.1	5.8	0.62	2.3	0.11	0.94	0.31	50
2	56		11.330	11.323	32.879	25.067	289.7	0.184	5.87	94.3	6.6	0.72	4.2	0.04	0.45	0.23	56
2	71		10.294	10.286	33.113	25.431	255.3	0.225	5.10	80.2	12.5	1.12	11.6	0.02	0.13	0.13	72
	75	ISL	9.975	9.966	33.182	25.539	245.1	0.235	4.90	76.6	14.5	1.22	13.6	0.02	0.09	0.11	76
2	85		9.327	9.318	33.354	25.779	222.4	0.258	4.44	68.5	19.2	1.45	17.9	0.02	0.03	0.08	86
	100	ISL	9.283	9.272	33.577	25.961	205.5	0.290	3.82	58.9	23.8	1.68	21.7	0.02	0.02	0.10	101
2	102		9.277	9.266	33.596	25.977	204.0	0.294	3.74	57.7	24.3	1.70	22.1	0.02	0.02	0.10	103
	125	ISL	9.065	9.055	33.799	26.170	186.1	0.339	3.06	47.0	29.3	1.92	25.8	0.02	0.01	0.09	126
2	126		9.049	9.035	33.804	26.176	185.5	0.341	3.04	46.7	29.5	1.93	25.9	0.02	0.01	0.09	127
	150	ISL	8.300	8.285	33.840	26.321	172.0	0.384	3.29	49.7	33.7	1.97	26.7	0.02	0.01	0.07	151
2	153		8.201	8.185	33.840	26.335	170.6	0.389	3.32	50.0	34.2	1.98	26.8	0.02	0.01	0.07	154
	200	ISL	7.863	7.843	33.944	26.468	158.8	0.466									202
2	204		7.834	7.814	33.953	D 26.479	157.8	0.473									206

RV NEW HORIZON CRUISE SQ87 LEG II STATION N 13

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 43.8 N	124 23.6 W	15/05/87	1151 GMT	3416 M	340	35 KT		2	1015.3 MB	12.9 C	12.5 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	13	12.63	12.63	32.678	24.667	326.8		6.45	106.5	1.5	0.41	0.0	0.02	1.05	0.13	13

RV NEW HORIZON CRUISE SQ87 LEG II STATION N 14

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 38.9 N	124 20.9 W	15/05/87	1308 GMT	3401 M	330	28 KT	330 07 06	1	1014.6 MB	13.1 C	13.0 C	7/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	0	12.833	12.833	32.735 D	24.672	326.0	0.000									0
2	13	12.837	12.835	32.739	24.675	326.1	0.042	6.52	108.1	0.7	0.39	0.1	0.02	1.70	0.43	13
	20 ISL	12.628	12.625	32.803	24.765	317.7	0.065	6.53	107.9	1.1	0.43	0.2	0.03	2.36	0.70	20
2	23	12.539	12.536	32.831	24.804	314.0	0.074	6.54	107.8	1.3	0.44	0.3	0.03	2.64	0.82	23
	30 ISL	10.861	10.857	33.192	25.393	258.0	0.094	5.87	93.6	13.1	1.05	9.9	0.14	2.03	0.91	30
2	33	10.125	10.121	33.341	25.636	235.0	0.102	5.53	86.8	18.1	1.31	14.1	0.19	1.66	0.95	33
2	42	9.567	9.562	33.273	25.676	231.3	0.123	4.93	76.4	19.4	1.44	16.3	0.21	1.11	0.76	42
	50 ISL	9.401	9.396	33.354	25.767	222.9	0.141	4.66	72.0	22.4	1.57	18.4	0.26	0.77	0.66	50
2	59	9.314	9.308	33.491	25.888	211.5	0.161	4.45	68.7	25.8	1.69	20.7	0.31	0.49	0.59	59
2	72	8.925	8.917	33.592	26.029	198.3	0.187	4.03	61.7	27.4	1.78	23.0	0.29	0.21	0.53	73
	75 ISL	8.867	8.859	33.618	26.058	195.6	0.193	3.95	60.4	28.1	1.81	23.5	0.26	0.17	0.48	76
2	86	8.689	8.680	33.706	26.155	186.6	0.214	3.71	56.5	30.6	1.89	25.2	0.14	0.10	0.31	87
	100 ISL	8.427	8.417	33.775	26.250	177.8	0.240	3.44	52.1	32.8	1.94	26.4	0.07	0.08	0.29	101
2	104	8.353	8.342	33.791	26.273	175.6	0.247	3.37	51.0	33.4	1.95	26.6	0.06	0.07	0.29	105
	125 ISL	8.029	8.016	33.900	26.408	163.2	0.282	3.04	45.7	37.5	2.06	28.5	0.04	0.05	0.30	126
2	129	7.976	7.963	33.917	26.429	161.3	0.289	3.00	45.0	38.2	2.08	28.8	0.04	0.05	0.30	130
	150 ISL	7.761	7.746	33.940	26.479	156.9	0.322	3.00	44.8	39.3	2.14	29.2	0.04	0.03	0.25	151
2	154	7.727	7.712	33.940	26.484	156.5	0.328	3.00	44.8	39.4	2.15	29.2	0.04	0.03	0.24	155
	200 ISL	7.384	7.365	33.985	26.569	149.0	0.399	2.76	40.9	43.8	2.22	31.0	0.03	0.02	0.17	202
2	203	7.362	7.343	33.988	26.574	148.6	0.403	2.74	40.5	44.1	2.22	31.1	0.03	0.02	0.17	205

RV NEW HORIZON CRUISE SQ87 LEG II STATION N 15

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 33.8 N	124 16.9 W	15/05/87	1429 GMT	3401 M	330	32 KT	330 08 06		1014.2 MB	13.2 C	12.9 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	13	12.36	12.36	33.047	25.005	294.6		6.53	107.4	3.0	0.59	1.1	0.05	3.31	1.23	13

RV NEW HORIZON CRUISE SQ87 LEG II STATION N 16

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 27.3 N	124 12.9 W	15/05/87	1549 GMT	3430 M	330	28 KT		1	1014.2 MB	13.3 C	12.8 C	5/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	0 ISL	12.482	12.482	33.266	25.151	280.3	0.000	6.81	112.4	1.6	0.34	0.1	0.03	6.98	2.15	0
2	3	12.482	12.482	33.266	25.151	280.4	0.008	6.81	112.4	1.6	0.34	0.1	0.03	6.98	2.15	3
	10 ISL	12.482	12.481	33.268	25.153	280.4	0.028	6.80	112.3	1.4	0.31	0.1	0.04	7.17	2.07	10
2	12	12.482	12.480	33.268	25.153	280.5	0.034	6.80	112.3	1.4	0.31	0.1	0.04	7.22	2.06	12
	20 ISL	12.309	12.306	33.292	25.205	275.8	0.056	6.69	110.1	2.8	0.44	0.3	0.05	6.98	2.33	20
2	22	12.266	12.263	33.298	25.218	274.6	0.061	6.66	109.5	3.1	0.47	0.3	0.05	6.92	2.35	22
	30 ISL	10.489	10.485	33.441	25.652	233.4	0.082	5.40	85.5	18.2	1.35	11.1	0.17	3.85	1.47	30
2	32	10.024	10.020	33.485	25.766	222.6	0.086	5.06	79.3	22.1	1.57	14.0	0.20	3.16	1.26	32
2	40	9.398	9.394	33.563	25.930	207.1	0.103	4.47	69.1	27.3	1.79	18.9	0.27	3.70	1.52	40
	50 ISL	9.013	9.008	33.621	26.037	197.1	0.124	4.05	62.1	28.9	1.83	21.9	0.29	2.02	1.10	50
2	58	8.855	8.849	33.654	26.088	192.4	0.139	3.84	58.7	30.1	1.86	23.1	0.31	0.35	0.62	58
2	73	8.522	8.514	33.732	26.201	182.0	0.167	3.45	52.4	32.2	1.95	26.0	0.10	0.17	0.40	74
	75 ISL	8.505	8.497	33.738	26.208	181.3	0.171	3.44	52.2	32.3	1.96	26.2	0.10	0.16	0.40	76
2	87	8.429	8.420	33.773	26.248	177.8	0.193	3.37	51.0	33.1	2.00	26.8	0.09	0.12	0.39	88
2	97	8.307	8.297	33.820	26.303	172.7	0.210	3.20	48.3	34.7	2.05	27.3	0.07	0.10	0.32	98
	100 ISL	8.272	8.262	33.832	26.318	171.4	0.215	3.17	47.9	35.0	2.05	27.3	0.07	0.10	0.32	101
2	125	7.998	7.986	33.918	26.426	161.4	0.257	2.95	44.3	37.7	2.09	27.5	0.05	0.09	0.35	126
2	146	7.791	7.777	33.977	26.503	154.5	0.290	2.65	39.6	41.2	2.22	29.6	0.04	0.05	0.27	147
	150 ISL	7.727	7.712	33.980	26.515	153.4	0.296	2.63	39.2	41.9	2.23	29.9	0.04	0.05	0.27	151
2	192	7.053	7.035	34.016	26.639	142.1	0.358	2.40	35.3	49.5	2.37	32.6	0.01	0.03	0.22	194
2	200	6.812	6.794	34.014 D	26.670	139.2	0.369									202

RV NEW HORIZON CRUISE SQ87 LEG II STATION N 28

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
37 46.2 N	123 24.5 W	17/05/87	1838 GMT	1482 M	340	14 KT		2	1011.1 MB	10.0 C	9.6 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	14	10.83	10.83	33.548	25.676	230.8		5.23	83.5	19.2	1.31	15.6	0.32	2.47	0.65	14

RV NEW HORIZON — CRUISE SQ87 LEG II — STATION N 30

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
37 52.9 N	123 28.6 W	17/05/87	2012 GMT	1172 M	340	07 KT		1	1013.0 MB	13.9 C	13.3 C	7/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	10.792	10.792	33.493	25.639	233.9	0.000	5.57	88.8	16.9	1.31	14.0	0.27	1.72	0.41	0
2	3		10.792	10.792	33.493	25.639	234.0	0.007	5.57	88.8	16.9	1.31	14.0	0.27	1.72	0.41	3
	10	ISL	10.647	10.646	33.493	25.665	231.7	0.023	5.59	88.8	16.6	1.29	13.7	0.27	1.89	0.55	10
2	11		10.623	10.622	33.493	25.669	231.4	0.026	5.59	88.8	16.6	1.29	13.7	0.27	1.93	0.57	11
	20	ISL	10.606	10.604	33.492	25.671	231.3	0.046	5.57	88.4	16.6	1.31	13.9	0.27	2.21	0.63	20
2	21		10.604	10.602	33.492	25.672	231.3	0.049	5.57	88.4	16.6	1.31	13.9	0.27	2.22	0.64	21
	30	ISL	10.564	10.560	33.508	25.691	229.7	0.070	5.44	86.3	17.2	1.37	14.3	0.28	1.70	0.58	30
2	31		10.559	10.555	33.511	25.695	229.4	0.072	5.42	86.0	17.3	1.38	14.4	0.28	1.63	0.57	31
2	41		10.512	10.507	33.539	25.725	226.7	0.095	5.20	82.4	18.2	1.68U	15.3	0.31	1.22	0.59	41
	50	ISL	10.447	10.441	33.548	25.743	225.2	0.115	5.17	81.8	18.5	1.43	15.9	0.30	1.01	0.56	50
2	57		10.320	10.313	33.539	25.758	223.9	0.131	5.15	81.3	18.8	1.45	16.3	0.29	0.84	0.52	57
2	72		9.642	9.634	33.832	26.101	191.6	0.162	3.05	47.5	28.0	1.90	25.5	0.06	0.14	0.38	73
	75	ISL	9.537	9.529	33.856	26.137	188.2	0.168	2.97	46.1	28.8	1.92	25.8	0.06	0.13	0.36	76
2	87		9.208	9.199	33.904	26.229	179.8	0.190	2.67	41.2	30.7	1.99	27.0	0.05	0.08	0.32	88
	100	ISL	9.012	9.001	33.956	26.301	173.2	0.213	2.50	38.4	32.9	2.07	28.0	0.03	0.06	0.29	101
2	102		8.988	8.977	33.963	26.310	172.3	0.216	2.48	38.1	33.3	2.08	28.1	0.03	0.06	0.29	103
	125	ISL	8.598	8.585	34.023	26.418	162.4	0.254	2.22	33.8	38.6	2.22	29.9	0.18	0.03	0.25	126
2	128		8.556	8.543	34.028	26.429	161.5	0.259	2.19	33.3	39.2	2.24	30.1	0.20	0.03	0.25	129
	150	ISL	8.500	8.484	34.046	26.452	159.7	0.295	2.15	32.7	39.7	2.30	30.3	0.17	0.03	0.22	151
2	153		8.492	8.476	34.045	26.452	159.7	0.299	2.14	32.5	39.8	2.30	30.3	0.17	0.03	0.22	154
	200	ISL	8.192	8.172	34.068	26.516	154.4	0.373	2.07	31.2	42.7	2.31	31.1	0.16	0.02	0.18	202
2	203		8.173	8.152	34.070	26.521	154.0	0.378	2.07	31.2	42.9	2.31	31.1	0.16	0.02	0.18	205

RV NEW HORIZON — CRUISE SQ87 LEG II — STATION N 34

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 7.0 N	123 38.2 W	17/05/87	2321 GMT	1885 M	340	08 KT		1	1012.7 MB	11.7 C	10.6 C	6/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	0		11.164	11.164	32.947D	25.148	280.6	0.000									0
2	5		11.171	11.170	32.947	25.147	280.9	0.014	5.80	92.9	7.8	0.85	5.7	0.07	1.08	0.12	5
	10	ISL	11.120	11.119	32.956	25.163	279.4	0.028	5.77	92.4	8.1	0.88	6.1	0.07	1.11	0.13	10
2	13		11.089	11.087	32.961	25.173	278.6	0.036	5.76	92.1	8.3	0.89	6.3	0.07	1.12	0.14	13
	20	ISL	10.999	10.997	32.972	25.198	276.4	0.056	5.73	91.5	8.6	0.91	6.8	0.07	1.03	0.13	20
2	23		10.960	10.957	32.977	25.208	275.4	0.064	5.72	91.2	8.8	0.92	7.2	0.07	0.99	0.12	23
	30	ISL	10.498	10.494	33.058	25.352	261.9	0.083	5.39	85.2	11.5	1.10	10.0	0.10	0.51	0.14	30
2	33		10.297	10.293	33.098	25.418	255.7	0.091	5.23	82.3	12.7	1.19	11.3	0.11	0.33	0.15	33
2	42		10.129	10.124	33.160	25.495	248.6	0.113	5.03	78.9	14.2	1.30	12.8	0.08	0.42	0.14	42
	50	ISL	10.023	10.017	33.190	25.536	244.8	0.133	4.95	77.4	14.8	1.32	13.9	0.08	0.39	0.13	50
2	57		9.893	9.887	33.236	25.594	239.5	0.150	4.84	75.5	15.4	1.36	15.4	0.08	0.31	0.12	57
2	74		9.172	9.164	33.568	25.971	203.9	0.188	3.91	60.2	25.8	1.76	23.5	0.23	0.11	0.16	75
	75	ISL	9.146	9.138	33.586	25.989	202.2	0.190	3.84	59.0	26.3	1.78	23.9	0.22	0.11	0.16	76
2	88		8.914	8.905	33.780	26.178	184.5	0.215	3.06	46.9	31.4	2.00	27.3	0.03	0.08	0.21	89
	100	ISL	8.802	8.791	33.838	26.241	178.8	0.237	2.82	43.1	33.2	2.08	28.5	0.03	0.07	0.23	101
2	103		8.782	8.771	33.844	26.249	178.1	0.242	2.79	42.6	33.5	2.09	28.6	0.03	0.07	0.24	104
	125	ISL	8.612	8.599	33.906	26.324	171.2	0.280	2.46	37.4	36.8	2.17	30.1	0.03	0.06	0.29	126
2	128		8.595	8.582	33.913	26.333	170.6	0.286	2.43	37.0	37.1	2.18	30.2	0.03	0.06	0.29	129
	150	ISL	8.564	8.548	33.982	26.392	165.4	0.323	2.31	35.1	37.4	2.21	30.5	0.12	0.03	0.26	151
2	153		8.563	8.547	33.991	26.399	164.8	0.328	2.30	35.0	37.4	2.21	30.5	0.13	0.03	0.25	154
	200	ISL	8.308	8.287	34.073	26.503	155.7	0.403	2.03	30.7	41.0	2.32	31.6	0.09	0.01	0.21	202
2	206		8.276	8.255	34.084	26.517	154.5	0.412	1.99	30.1	41.5	2.33	31.7	0.08	0.01	0.20	208

RV NEW HORIZON — CRUISE SQ87 LEG II — STATION N 37

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 0.2 N	123 10.7 W	18/05/87	1528 GMT	90 M	320	15 KT	320 08 08	1	1013.0 MB	11.9 C	11.0 C	7/8	ST

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	10.80	10.80	33.670	25.776	221.0	0.000	5.10	81.4	23.7	1.41	17.9	0.32	1.40	0.59	0
1	1		10.80	10.80	33.670	25.776	221.0	0.002	5.10	81.4	23.7	1.41	17.9	0.32	1.40	0.59	1
	10	ISL	10.81	10.81	33.670	25.774	221.3	0.022	5.09	81.3	23.6	1.49	17.9	0.31	1.47	0.58	10
1	11		10.81	10.81	33.670	25.774	221.4	0.024	5.09	81.3	23.6	1.50	17.9	0.31	1.48	0.58	11
	20	ISL	10.79	10.79	33.671	25.779	221.2	0.044	5.06	80.8	23.6	1.54	17.9	0.32	1.46	0.63	20
1	21		10.79	10.79	33.671	25.779	221.2	0.046	5.06	80.8	23.6	1.54	17.9	0.32	1.46	0.63	21
	30	ISL	9.52	9.52	33.732	26.042	196.3	0.065	3.36	52.2	30.0	1.87	23.8	0.33	0.33	0.46	30
1	31		9.36	9.36	33.742	26.076	193.1	0.067	3.15	48.7	30.8	1.91	24.5	0.33	0.19	0.44	31
	50	ISL	9.06	9.05	33.817	26.183	183.3	0.103	2.63	40.4	33.9	2.01	26.9	0.34	0.10	0.45	50
1	52		9.03	9.02	33.825	26.194	182.2	0.107	2.57	39.5	34.2	2.02	27.2	0.34	0.09	0.45	52
	75	ISL	8.90	8.89	33.888	26.265	176.0	0.148	2.31	35.4	38.5	2.18	27.9	0.32	0.06	0.72	76
1	79		8.88	8.87	33.899	26.276	175.0	0.155	2.27	34.8	39.3	2.21	28.0	0.32	0.06	0.77	80

RV NEW HORIZON — CRUISE SQ87 LEG II — STATION N 38

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 4.9 N	123 13.1 W	18/05/87	1704 GMT		360	06 KT	320 05 06	2	1013.2 MB	11.2 C	10.9 C	8/8	ST

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	10.77	10.77	33.584	25.714	226.8	0.000	5.87	93.6	15.7	1.24	13.8	0.25	2.15	0.74	0
1	1		10.77	10.77	33.584	25.714	226.9	0.002	5.87	93.6	15.7	1.24	13.8	0.25	2.15	0.74	1
	10	ISL	10.76	10.76	33.584	25.716	226.9	0.023	5.89	93.9	15.8	1.26	13.8	0.27	2.17	0.88	10
1	11		10.76	10.76	33.584	25.716	226.9	0.025	5.89	93.9	15.8	1.26	13.8	0.27	2.17	0.90	11
	20	ISL	10.64	10.64	33.598	25.748	224.1	0.045	5.86	93.2	15.3	1.31	14.0	0.28	2.41	0.81	20
1	22		10.61	10.61	33.602	25.757	223.3	0.050	5.85	93.0	15.2	1.32	14.0	0.28	2.50	0.79	22
	30	ISL	10.61	10.61	33.608	25.761	223.0	0.068	5.87	93.3	15.2	1.35	13.8	0.28	3.14	0.91	30
1	32		10.61	10.61	33.610	25.763	222.9	0.072	5.88	93.4	15.2	1.36	13.8	0.28	3.25	0.94	32
	50	ISL	9.44	9.43	33.805	26.113	190.0	0.109	3.08	47.7	30.5	1.95	24.1	0.31	0.65	0.61	50
1	53		9.22	9.21	33.844	26.179	183.7	0.115	2.55	39.3	33.5	2.06	26.1	0.31	0.09	0.54	53
	75	ISL	9.05	9.04	33.887	26.240	178.4	0.155	2.24	34.4	37.8	2.25	27.3	0.29	0.07	0.83	76
1	79		9.02	9.01	33.895	26.251	177.4	0.162	2.18	33.5	38.6	2.28	27.5	0.29	0.07	0.88	80

RV NEW HORIZON CRUISE SQ87 LEG II STATION N 39

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 9.2 N	123 15.8 W	18/05/87	1728 GMT	115 M	360	06 KT	320 05 06	2	1013.2 MB	11.2 C	10.9 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	10.49	10.49	33.652	25.816	217.2	0.000	6.12	97.0	15.2	1.16	13.4	0.30	9.05	1.60	0
1	1	10.49	10.49	33.652	25.816	217.2	0.002	6.12	97.0	15.2	1.16	13.4	0.30	9.05	1.60	1
	10 ISL	10.40	10.40	33.652	25.832	215.9	0.022	5.95	94.1	15.7	1.20	14.2	0.29	9.21	1.78	10
1	11	10.38	10.38	33.652	25.835	215.6	0.024	5.91	93.5	15.8	1.20	14.3	0.29	9.23	1.79	11
	20 ISL	10.22	10.22	33.669	25.876	211.9	0.043	5.49	86.5	19.4	1.41	17.3	0.31	6.91	1.10	20
1	22	10.19	10.19	33.673	25.884	211.2	0.047	5.40	85.1	20.2	1.46	17.9	0.31	6.39	0.93	22
	30 ISL	10.19	10.19	33.672	25.884	211.4	0.064	5.35	84.3	20.7	1.47	18.1	0.31	6.44	0.83	30
1	32	10.19	10.19	33.671	25.883	211.5	0.068	5.34	84.1	20.8	1.47	18.1	0.31	6.45	0.80	32
	50 ISL	9.74	9.73	33.705	25.985	202.1	0.106	4.55	71.0	28.0	1.73	22.7	0.29	1.75	0.48	50
1	53	9.63	9.62	33.716	26.012	199.6	0.112	4.36	67.8	29.5	1.78	23.7	0.29	0.85	0.43	53
	75 ISL	8.89	8.88	33.835	26.225	179.8	0.153	2.85	43.6	34.9	1.99	27.5	0.12	0.22	0.42	76
1	79	8.75	8.74	33.857	26.264	176.2	0.161	2.57	39.2	35.9	2.03	28.2	0.09	0.10	0.42	80

RV NEW HORIZON CRUISE SQ87 LEG II STATION N 40

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 13.2 N	123 19.0 W	18/05/87	2014 GMT	128 M			300 05 06	2	1013.1 MB	13.6 C	12.2 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	9.98	9.98	33.597	25.860	212.9	0.000	4.58	71.8	27.9	1.76	22.2	0.19	0.54	0.15	0
1	1	9.98	9.98	33.597	25.860	213.0	0.002	4.58	71.8	27.9	1.76	22.2	0.19	0.54	0.15	1
	10 ISL	9.44	9.44	33.590	25.944	205.2	0.021	4.39	68.0	27.7	1.74	22.0	0.17	0.53	0.23	10
1	12	9.30	9.30	33.590	25.967	203.1	0.025	4.33	66.8	27.6	1.73	22.0	0.17	0.53	0.25	12
	20 ISL	9.28	9.28	33.596	25.975	202.5	0.041	4.25	65.6	27.7	1.75	22.2	0.17	0.54	0.28	20
1	22	9.28	9.28	33.597	25.976	202.4	0.045	4.23	65.3	27.7	1.76	22.2	0.17	0.54	0.29	22
	30 ISL	9.29	9.29	33.628	25.998	200.4	0.061	4.11	63.4	28.9	1.81	22.9	0.20	0.54	0.32	30
1	32	9.29	9.29	33.638	26.006	199.8	0.065	4.08	63.0	29.3	1.83	23.1	0.21	0.54	0.33	32
	50 ISL	9.32	9.31	33.757	26.095	191.7	0.101	3.71	57.3	33.8	2.04	25.6	0.29	0.51	0.42	50
1	53	9.33	9.32	33.784	26.114	189.9	0.106	3.62	56.0	34.6	2.07	26.1	0.29	0.51	0.43	53
	75 ISL	8.64	8.63	33.917	26.328	170.0	0.146	2.57	39.1	37.6	2.16	28.7	0.12	0.14	0.32	76
1	80	8.48	8.47	33.948	26.377	165.4	0.154	2.33	35.4	38.3	2.18	29.3	0.08	0.05	0.30	81

RV NEW HORIZON CRUISE SQ87 LEG II STATION N 41

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 17.7 N	123 22.1 W	18/05/87	2218 GMT		340	10 KT	310 06 06	2	1012.5 MB	13.1 C	12.0 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	10.09	10.09	33.549	25.804	218.3	0.000	4.73	74.3	26.1	1.70	20.2	0.13	1.05	0.17	0
1	1	10.09	10.09	33.549	25.804	218.3	0.002	4.73	74.3	26.1	1.70	20.2	0.13	1.05	0.17	1
	10 ISL	9.60	9.60	33.602	25.927	206.8	0.021	4.52	70.2	27.8	1.80	21.5	0.16	0.76	0.20	10
1	11	9.53	9.53	33.610	25.945	205.1	0.023	4.49	69.7	28.0	1.81	21.7	0.16	0.72	0.20	11
	20 ISL	9.43	9.43	33.619	25.969	203.1	0.042	4.43	68.6	28.1	1.82	22.0	0.16	0.75	0.27	20
	30 ISL	9.38	9.38	33.627	25.983	201.9	0.062	4.36	67.4	28.3	1.84	22.3	0.16	0.79	0.32	30
1	33	9.38	9.38	33.629	25.985	201.8	0.068	4.34	67.1	28.4	1.84	22.4	0.16	0.80	0.33	33
1	44	8.97	8.97	33.692	26.100	191.1	0.090	3.65	55.9	30.7	1.96	24.2	0.16	0.28	0.27	44
	50 ISL	8.85	8.84	33.742	26.158	185.7	0.101	3.30	50.5	32.7	2.05	25.3	0.18	0.22	0.33	50
1	58	8.74	8.73	33.805	26.224	179.5	0.116	2.92	44.6	35.5	2.15	26.5	0.20	0.14	0.42	58
1	74	8.58	8.57	33.863	26.295	173.1	0.144	2.59	39.4	38.6	2.24	27.7	0.11	0.06	0.46	75
	75 ISL	8.57	8.56	33.869	26.301	172.5	0.145	2.57	39.1	38.7	2.24	27.8	0.11	0.06	0.46	76
1	88	8.46	8.45	33.938	26.372	166.0	0.167	2.37	36.0	39.2	2.27	28.7	0.08	0.06	0.38	89
	100 ISL	8.41	8.40	33.964	26.400	163.6	0.187	2.34	35.5	39.3	2.27	29.0	0.08	0.05	0.37	101
1	109	8.39	8.38	33.971	26.409	162.9	0.202	2.31	35.0	39.4	2.27	29.1	0.08	0.04	0.36	110
	125 ISL	8.33	8.32	33.979	26.425	161.7	0.228	2.27	34.3	40.6	2.32	29.3	0.13	0.06	0.38	126
1	130	8.31	8.30	33.982	26.430	161.3	0.236	2.26	34.2	41.0	2.33	29.4	0.15	0.06	0.39	131

RV NEW HORIZON CRUISE SQ87 LEG II STATION N 42

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 22.2 N	123 24.8 W	19/05/87	0003 GMT		040	03 KT	320 07 06	2	1011.8 MB	12.0 C	11.7 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	10.50	10.50	33.316	25.552	242.2	0.000	5.33	84.3	10.9	1.44	14.9	0.09	1.29	0.25	0
1	10	9.73	9.73	33.401	25.749	223.7	0.023	5.00	77.8	20.7	1.55	16.8	0.09	1.66	0.28	10
	20 ISL	9.67	9.67	33.482	25.822	217.0	0.045	4.84	75.3	22.5	1.64	18.0	0.10	1.51	0.31	20
1	27	9.63	9.63	33.494	25.838	215.6	0.060	4.74	73.7	23.7	1.68	18.6	0.11	1.41	0.33	27
	30 ISL	9.58	9.58	33.499	25.850	214.5	0.067	4.66	72.3	23.6	1.69	18.9	0.11	1.38	0.33	30
1	37	9.44	9.44	33.504	25.877	212.1	0.082	4.48	69.3	23.4	1.69	19.4	0.09	1.24	0.32	37
1	47	9.27	9.26	33.503	25.904	209.7	0.103	4.29	66.1	23.1	1.71	20.0	0.07	0.76	0.26	47
	50 ISL	9.17	9.16	33.517	25.931	207.2	0.109	4.21	64.7	23.5	1.72	20.5	0.06	0.59	0.23	50
1	63	8.80	8.79	33.619	26.069	194.3	0.135	3.70	57.4	26.7	1.83	23.1	0.04	0.04	0.11	64
	75 ISL	8.78	8.77	33.751	26.176	184.4	0.158	3.19	49.3	30.2	2.00	25.3	0.02	0.05	0.15	76
1	79	8.78	8.77	33.790	26.207	181.6	0.165	3.03	46.8	31.5	2.06	26.0	0.02	0.05	0.16	80
	100 ISL	8.57	8.56	33.916	26.338	169.5	0.202	2.44	37.1	37.8	2.24	28.7	0.03	0.05	0.32	101
1	103	8.54	8.53	33.934	26.357	167.8	0.207	2.37	36.1	38.7	2.27	29.1	0.03	0.05	0.34	104

RV NEW HORIZON CRUISE SQ87 LEG II STATION N 43

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 19.8 N	123 29.6 W	19/05/87	0211 GMT	230 M	010	08 KT		1	1012.0 MB	11.7 C	10.8 C	6/8	AC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	11	10.79	10.79	33.131	25.358	261.0		5.75	91.5	12.7	1.04	9.7	0.07	1.50	0.21	11

RV NEW HORIZON CRUISE SQ87 LEG II STATION N 44

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 17.7 N	123 35.2 W	19/05/87	0430 GMT	526 M				1	1013.0 MB	11.7 C	10.6 C	4/8	AC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	12.385	12.385	32.725	24.750	318.5	0.000	6.26	102.8	3.0	0.53	0.5	0.05	0.83	0.07	0
2	3	12.385	12.385	32.725	24.750	318.6	0.010	6.26	102.8	3.0	0.53	0.5	0.05	0.83	0.07	3
	10 ISL	11.822	11.821	32.786	24.904	304.1	0.031	6.18	100.3	4.1	0.60	1.9	0.07	1.02	0.15	10
2	11	11.724	11.723	32.798	24.931	301.6	0.034	6.16	99.8	4.3	0.61	2.2	0.07	1.05	0.16	11
	20 ISL	11.473	11.471	32.858	25.024	293.0	0.061	6.10	98.3	5.6	0.67	3.8	0.07	1.23	0.18	20
2	21	11.455	11.452	32.865	25.032	292.1	0.064	6.09	98.1	5.8	0.68	4.0	0.07	1.24	0.18	21
	30 ISL	11.012	11.008	32.949	25.177	278.5	0.090	5.88	93.9	8.2	0.83	6.6	0.06	1.22	0.23	30
2	31	10.953	10.949	32.961	25.197	276.7	0.093	5.85	93.3	8.5	0.85	7.0	0.06	1.22	0.24	31
2	41	10.312	10.307	33.124	25.436	254.2	0.119	5.57	87.7	12.8	1.08	11.4	0.06	1.52	0.23	41
	50 ISL	9.942	9.936	33.210	25.565	242.0	0.141	5.09	79.5	16.2	1.28	14.8	0.12	0.74	0.17	50
2	56	9.754	9.748	33.263	25.638	235.3	0.156	4.75	73.9	18.4	1.40	16.9	0.17	0.13	0.13	56
2	72	9.267	9.259	33.509	25.910	209.7	0.191	4.16	64.1	25.4	1.67	22.3	0.27	0.13	0.15	73
	75 ISL	9.266	9.258	33.561	25.950	205.9	0.198	3.99	61.5	26.2	1.72	23.2	0.24	0.13	0.17	76
2	86	9.264	9.255	33.723	26.078	194.0	0.220	3.35	51.7	28.6	1.88	25.9	0.09	0.11	0.24	87
2	100	9.192	9.181	33.866	26.201	182.6	0.246	2.76	42.6	32.0	2.01	28.0	0.05	0.07	0.26	101
2	124	8.960	8.947	33.960	26.312	172.5	0.289	2.42	37.1	35.5	2.14	29.7	0.03	0.07	0.29	125
	125 ISL	8.951	8.938	33.962	26.315	172.2	0.290	2.41	37.0	35.6	2.14	29.7	0.03	0.07	0.29	126
2	150	8.711	8.695	33.998	26.382	166.4	0.333	2.32	35.4	37.0	2.25	30.2	0.09	0.06	0.27	151
	200 ISL	8.173	8.153	34.078	26.527	153.3	0.413	2.12	32.0	42.9	2.34	31.9	0.10	0.04	0.18	202
2	201	8.162	8.142	34.080	26.530	153.1	0.414	2.12	32.0	43.0	2.34	31.9	0.10	0.04	0.18	203

RV NEW HORIZON CRUISE SQ87 LEG II STATION N 45

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 16.1 N	123 38.9 W	19/05/87	0549 GMT	1067 M				2	1013.2 MB	10.6 C	10.0 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	12.710	12.710	32.738 D	24.698	323.5	0.000									0
2	4	12.565	12.564	32.744	24.731	320.5	0.013	6.24	102.9	3.3	0.58	1.0	0.05	0.71	0.06	4
	10 ISL	12.290	12.289	32.756	24.793	314.7	0.032	6.25	102.5	3.3	0.57	0.9	0.06	0.86	0.07	10
2	12	12.198	12.196	32.760	24.813	312.8	0.038	6.26	102.4	3.3	0.57	0.9	0.06	0.91	0.07	12
	20 ISL	11.979	11.976	32.770	24.862	308.4	0.063	6.18	100.7	3.8	0.60	1.5	0.08	0.84	0.17	20
2	22	11.947	11.944	32.772	24.870	307.7	0.069	6.16	100.3	3.9	0.61	1.7	0.08	0.81	0.19	22
	30 ISL	11.929	11.925	32.773	24.874	307.4	0.094	6.17	100.4	4.1	0.61	1.8	0.08	0.80	0.18	30
2	32	11.924	11.920	32.774	24.876	307.3	0.100	6.17	100.4	4.1	0.61	1.8	0.08	0.80	0.18	32
2	41	10.872	10.867	32.980	25.227	274.1	0.126	5.55	88.4	9.6	0.95	8.4	0.17	1.07	0.59	41
	50 ISL	10.153	10.147	33.117	25.457	252.3	0.150	5.13	80.5	13.8	1.18	12.7	0.16	0.60	0.40	50
2	57	9.776	9.770	33.218	25.599	238.9	0.167	4.83	75.2	16.9	1.34	15.5	0.16	0.14	0.15	57
2	72	9.359	9.351	33.555	25.931	207.7	0.201	3.96	61.2	25.0	1.74	22.3	0.36	0.14	0.22	73
	75 ISL	9.318	9.310	33.596	25.969	204.1	0.207	3.79	58.5	26.1	1.79	23.2	0.35	0.13	0.23	76
2	88	9.235	9.225	33.738	26.094	192.5	0.232	3.13	48.3	29.8	1.96	26.2	0.32	0.09	0.26	89
	100 ISL	9.240	9.229	33.879	26.204	182.4	0.255	2.64	40.8	31.9	2.08	27.7	0.13	0.06	0.28	101
2	103	9.241	9.230	33.910	26.228	180.1	0.260	2.54	39.2	32.3	2.10	27.9	0.08	0.05	0.28	104
	125 ISL	8.869	8.856	33.985	26.346	169.2	0.299	2.34	35.8	35.7	2.19	28.9	0.11	0.03	0.27	126
2	128	8.809	8.795	33.986	26.356	168.4	0.304	2.31	35.3	36.1	2.20	29.0	0.11	0.03	0.27	129
	150 ISL	8.648	8.632	34.002	26.395	165.1	0.341	2.21	33.7	37.7	2.25	29.5	0.28	0.03	0.32	151
2	153	8.634	8.618	34.003	26.397	164.9	0.346	2.20	33.5	37.9	2.25	29.6	0.30	0.03	0.33	154
	200 ISL	8.324	8.303	34.051	26.483	157.6	0.421	2.14	32.4	40.4	2.34	30.2	0.17	0.03	0.22	202
2	202	8.311	8.290	34.053	26.487	157.3	0.424	2.14	32.4	40.5	2.34	30.2	0.16	0.03	0.22	204

RV NEW HORIZON CRUISE SQ87 LEG II STATION N 46

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 13.9 N	123 43.1 W	19/05/87	0715 GMT	1854 M				2	1012.0 MB	11.1 C	10.0 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	12.497	12.497	32.748 D	24.747	318.9	0.000									0
2	4	12.493	12.492	32.747	24.747	318.9	0.013	6.20	102.1	3.3	0.60	0.7	0.08	0.63	0.08	4
	10 ISL	12.206	12.205	32.750	24.804	313.7	0.032	6.24	102.1	3.2	0.57	0.5	0.07	0.86	0.12	10
2	12	12.110	12.108	32.752	24.824	311.8	0.038	6.25	102.1	3.1	0.56	0.5	0.07	0.93	0.14	12
	20 ISL	11.952	11.949	32.783	24.877	306.9	0.063	6.20	100.9	3.7	0.59	1.0	0.08	1.16	0.17	20
2	22	11.935	11.932	32.792	24.888	306.0	0.069	6.18	100.6	3.9	0.60	1.2	0.08	1.19	0.18	22
	30 ISL	11.878	11.874	32.818	24.919	303.2	0.093	6.07	98.7	4.3	0.63	1.7	0.10	1.03	0.20	30
2	32	11.864	11.860	32.824	24.926	302.6	0.099	6.04	98.2	4.4	0.64	1.8	0.10	0.94	0.20	32
2	42	10.730	10.725	33.049	25.305	266.6	0.128	5.27	83.7	10.6	1.00	8.6	0.13	0.28	0.18	42
	50 ISL	9.942	9.936	33.227	25.579	240.8	0.148	4.72	73.7	16.6	1.30	14.2	0.17	0.18	0.15	50
2	57	9.446	9.440	33.374	25.775	222.2	0.164	4.29	66.3	21.5	1.53	18.5	0.21	0.09	0.13	57
2	73	9.346	9.338	33.648	26.006	200.7	0.198	3.53	54.5	26.9	1.82	23.3	0.35	0.08	0.23	74
	75 ISL	9.327	9.319	33.679	26.033	198.1	0.202	3.41	52.7	27.4	1.85	23.8	0.31	0.07	0.23	76
2	87	9.209	9.200	33.828	26.169	185.4	0.225	2.76	42.6	30.3	1.97	26.1	0.07	0.04	0.22	88
	100 ISL	9.121	9.110	33.889	26.231	179.8	0.249	2.49	38.3	32.8	2.06	27.3	0.06	0.04	0.27	101
2	103	9.103	9.092	33.895	26.239	179.1	0.254	2.46	37.9	33.3	2.08	27.4	0.06	0.04	0.28	104
	125 ISL	8.943	8.930	33.950	26.307	173.0	0.293	2.33	35.7	35.2	2.18	28.0	0.10	0.04	0.34	126
2	128	8.915	8.901	33.956	26.316	172.2	0.298	2.33	35.7	35.4	2.19	28.1	0.11	0.04	0.34	129
	150 ISL	8.583	8.567	34.013	26.413	163.4	0.335	2.22	33.8	37.9	2.24	29.1	0.18	0.02	0.27	151
2	153	8.536	8.520	34.020	26.426	162.2	0.340	2.20	33.4	38.2	2.25	29.3	0.19	0.02	0.26	154
	200 ISL	8.231	8.211	34.070	26.512	154.8	0.414	2.01	30.4	41.9	2.36	30.8	0.19	0.02	0.22	202
2	205	8.199	8.178	34.076	26.522	154.0	0.422	1.99	30.0	42.3	2.37	31.0	0.19	0.02	0.22	207

RV NEW HORIZON CRUISE SQ87 LEG II STATION N 47

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 10.9 N	123 41.0 W	19/05/87	0951 GMT	1879 M	100	04 KT			1011.1 MB	12.0 C	11.1 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	11	11.54	11.54	32.866	25.018	293.3		6.00	96.9	6.3	0.73	3.6	0.06	0.94	0.14	11

RV NEW HORIZON CRUISE SQ87 LEG II STATION N 48

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 6.9 N	123 38.2 W	19/05/87	1048 GMT	1860 M				2	1011.0 MB	10.6 C	10.0 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	13	10.47	10.47	33.122	25.406	256.4		5.71	90.2	12.4	0.99	9.5	0.06	1.78	0.24	13

RV NEW HORIZON CRUISE SQ87 LEG II STATION N 49

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 3.6 N	123 36.2 W	19/05/87	1309 GMT	1482 M				2	1011.3 MB	10.7 C	10.1 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	10.278	10.278	33.238	25.530	244.4	0.000	5.34	84.1	16.0	1.33	13.3	0.07	0.69	0.16	0
2	3	10.278	10.278	33.238	25.530	244.5	0.007	5.34	84.1	16.0	1.33	13.3	0.07	0.69	0.16	3
	10 ISL	10.052	10.051	33.257	25.583	239.5	0.024	5.25	82.2	16.8	1.35	14.0	0.07	1.03	0.27	10
2	11	10.012	10.011	33.261	25.593	238.6	0.027	5.23	81.8	17.0	1.35	14.2	0.07	1.08	0.29	11
	20 ISL	9.876	9.874	33.326	25.666	231.8	0.048	5.05	78.8	19.1	1.43	15.9	0.09	0.69	0.21	20
2	21	9.863	9.861	33.335	25.676	231.0	0.050	5.02	78.3	19.4	1.44	16.1	0.09	0.63	0.20	21
	30 ISL	9.608	9.605	33.444	25.803	219.0	0.070	4.58	71.1	22.5	1.59	18.5	0.13	0.51	0.22	30
2	31	9.584	9.581	33.457	25.817	217.7	0.073	4.53	70.3	22.8	1.61	18.8	0.14	0.51	0.22	31
2	41	9.596	9.591	33.561	25.896	210.4	0.094	4.36	67.7	25.4	1.76	20.7	0.20	0.46	0.28	41
	50 ISL	9.541	9.535	33.573	25.915	208.8	0.113	4.28	66.4	26.3	1.79	21.3	0.20	0.45	0.29	50
2	56	9.500	9.494	33.583	25.930	207.5	0.125	4.23	65.6	26.6	1.80	21.6	0.20	0.44	0.29	56
2	71	9.501	9.493	33.789	26.091	192.5	0.155	3.18	49.4	28.1	1.93	24.6	0.11	0.14	0.29	72
	75 ISL	9.494	9.486	33.809	26.108	191.0	0.163	3.05	47.3	28.3	1.94	24.9	0.10	0.13	0.30	76
2	86	9.475	9.465	33.853	26.145	187.7	0.184	2.82	43.8	29.1	1.98	25.6	0.09	0.09	0.31	87
	100 ISL	9.175	9.164	33.934	26.258	177.3	0.209	2.47	38.1	32.7	2.11	27.2	0.11	0.05	0.29	101
2	102	9.125	9.114	33.945	26.274	175.8	0.213	2.43	37.4	33.3	2.13	27.4	0.12	0.05	0.29	103
	125 ISL	8.777	8.764	34.003	26.375	166.5	0.252	2.23	34.1	36.9	2.23	28.9	0.19	0.03	0.28	126
2	127	8.754	8.741	34.005	26.380	166.1	0.256	2.23	34.1	37.1	2.23	29.0	0.19	0.03	0.28	128
	150 ISL	8.564	8.548	34.027	26.427	162.0	0.293	2.19	33.3	38.7	2.28	29.7	0.14	0.02	0.24	151
2	153	8.546	8.530	34.029	26.431	161.7	0.298	2.19	33.3	38.8	2.29	29.8	0.13	0.02	0.23	154
	200 ISL	8.283	8.262	34.066	26.501	155.8	0.373	2.06	31.1	41.6	2.35	30.6	0.16	0.02	0.21	202
2	203	8.266	8.245	34.069	26.506	155.4	0.377	2.05	31.0	41.8	2.35	30.7	0.16	0.02	0.21	205

RV NEW HORIZON CRUISE SQ87 LEG II STATION N 50

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 0.0 N	123 33.2 W	19/05/87	1426 GMT	1210 M	320	04 KT	320 10 07	2	1012.3 MB	11.5 C	11.2 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	10	10.07	10.07	33.548	25.807	218.2		5.05	79.3	23.4	1.59	19.3	0.22	0.56	0.26	10

RV NEW HORIZON CRUISE SQ87 LEG II STATION N 51

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
37 57.3 N	123 31.5 W	19/05/87	1715 GMT	1284 M	320	04 KT	320 12 07	2	1012.6 MB	12.7 C	11.9 C	8/8	ST

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	13	10.78	10.78	33.556	25.691	229.4		5.60	89.3	18.6	1.38	15.6	0.30	2.23	0.57	13

RV NEW HORIZON — CRUISE SQ87 LEG II — STATION N 54

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 0.1 N	123 48.3 W	19/05/87	2102 GMT	2998 M	010	09 KT		1	1012.3 MB	11.7 C	10.6 C	6/8	ST

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	11.011	11.011	33.500	25.606	237.1	0.000	5.49	88.0	16.3	1.30	14.0	0.33	0.76	0.21	0
2	3		11.011	11.011	33.500	25.606	237.2	0.007	5.49	88.0	16.3	1.30	14.0	0.33	0.76	0.21	3
	10	ISL	10.952	10.951	33.503	25.619	236.1	0.024	5.65	90.4	16.4	1.32	14.0	0.31	1.30	0.40	10
2	11		10.940	10.939	33.504	25.622	235.9	0.026	5.68	90.9	16.4	1.32	14.0	0.31	1.40	0.43	11
	20	ISL	10.860	10.858	33.509	25.640	234.3	0.047	5.70	91.0	16.6	1.32	14.2	0.31	1.81	0.56	20
2	22		10.845	10.842	33.511	25.644	234.0	0.052	5.70	91.0	16.6	1.32	14.3	0.31	1.85	0.58	22
	30	ISL	10.821	10.817	33.516	25.653	233.4	0.071	5.69	90.8	16.7	1.34	14.4	0.29	1.78	0.69	30
2	32		10.818	10.814	33.517	25.654	233.3	0.075	5.69	90.8	16.7	1.34	14.4	0.29	1.74	0.71	32
2	42		10.802	10.797	33.516	25.656	233.3	0.099	5.69	90.7	16.9	1.35	14.3	0.29	1.70	0.68	42
	50	ISL	10.759	10.753	33.543	25.685	230.8	0.117	5.48	87.3	17.8	1.40	14.9	0.32	1.26	0.76	50
2	57		10.721	10.714	33.567	25.710	228.5	0.133	5.12	81.5	19.1	1.47	16.1	0.35	0.81	0.82	57
2	72		10.028	10.020	33.703	25.936	207.3	0.166	3.73	58.5	23.8	1.76	21.4	0.29	0.31	0.61	73
	75	ISL	9.887	9.878	33.730	25.981	203.1	0.172	3.53	55.2	24.8	1.81	22.3	0.24	0.26	0.57	76
2	87		9.433	9.423	33.827	26.132	189.0	0.196	2.95	45.7	28.3	1.97	24.9	0.04	0.14	0.42	88
	100	ISL	9.301	9.290	33.892	26.204	182.4	0.220	2.67	41.3	30.2	2.07	26.1	0.03	0.09	0.37	101
2	103		9.296	9.285	33.903	26.214	181.5	0.225	2.64	40.8	30.5	2.08	26.2	0.03	0.09	0.37	104
	125	ISL	9.148	9.134	33.956	26.279	175.7	0.264	2.45	37.8	31.0	2.15	26.9	0.03	0.06	0.30	126
2	127		9.134	9.120	33.959	26.284	175.3	0.268	2.44	37.6	31.0	2.15	26.9	0.03	0.06	0.30	128
	150	ISL	8.878	8.862	34.013	26.367	167.8	0.307	2.26	34.6	35.2	2.23	28.1	0.02	0.04	0.29	151
2	153		8.841	8.825	34.020	26.379	166.8	0.312	2.24	34.3	35.8	2.24	28.3	0.02	0.04	0.29	154
	200	ISL	8.292	8.271	34.073	26.505	155.5	0.388	2.13	32.2	40.8	2.36	29.9	0.02	0.02	0.17	202
2	214		8.128	8.106	34.090	26.543	152.0	0.410	2.10	31.6	42.3	2.39	30.4	0.02	0.02	0.14	216

RV NEW HORIZON — CRUISE SQ87 LEG II — STATION N 56

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 10.6 N	123 58.9 W	19/05/87	2257 GMT	3567 M	320	14 KT		1	1012.9 MB	12.1 C	10.6 C	6/8	CU

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	11		11.04	11.04	33.365	25.496	247.8		5.86	93.9	14.6	1.17	11.5	0.24	0.95	0.24	11

RV NEW HORIZON — CRUISE SQ87 LEG II — STATION N 58

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
38 2.7 N	123 59.8 W	20/05/87	0033 GMT	3557 M	330	20 KT		1	1012.5 MB	12.7 C	10.6 C	5/8	AS

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	11		11.26	11.26	33.469	25.537	243.9		5.75	92.6	15.7	1.22	12.7	0.29	0.92	0.25	11

RV NEW HORIZON — CRUISE SQ87 LEG II — STATION N 60

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
37 54.6 N	123 59.9 W	20/05/87	0159 GMT	3628 M	340	20 KT		1	1014.0 MB	11.7 C	10.6 C	1/8	CU

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	0		12.295	12.295	33.264 D	25.186	277.1	0.000									0
2	4		12.180	12.179	33.306 D	25.240	272.0	0.011									4
	10	ISL	11.879	11.878	33.392	25.364	260.4	0.027									10
2	13		11.729	11.727	33.435	25.425	254.7	0.035	5.96	96.9	13.3	1.09	9.9	0.25	1.34	0.27	13
	20	ISL	11.279	11.277	33.430	25.504	247.3	0.052	5.46	87.9	14.6	1.21	11.6	0.28	1.18	0.14	20
2	23		11.057	11.054	33.418	25.534	244.4	0.060	5.25	84.1	15.1	1.26	12.3	0.29	1.11	0.08	23
	30	ISL	10.436	10.432	33.430	25.653	233.3	0.076	4.87	77.0	17.6	1.45	14.9	0.35	0.64	0.12	30
2	33		10.177	10.173	33.442	25.707	228.3	0.083	4.73	74.4	18.8	1.53	16.0	0.37	0.45	0.15	33
2	43		9.603	9.598	33.505	25.852	214.7	0.105	4.41	68.5	22.3	1.66	18.9	0.40	0.35	0.14	43
	50	ISL	9.498	9.492	33.548	25.902	210.0	0.120	4.28	66.3	23.5	1.71	20.2	0.42	0.30	0.17	50
2	58		9.456	9.450	33.591	25.943	206.3	0.137	4.14	64.1	24.6	1.76	21.3	0.44	0.24	0.22	58
2	73		9.038	9.030	33.656	26.061	195.3	0.167	3.66	56.2	27.8	1.88	23.7	0.10	0.10	0.23	74
	75	ISL	9.010	9.002	33.662	26.070	194.5	0.171	3.62	55.5	27.9	1.89	23.9	0.09	0.10	0.23	76
2	89		8.902	8.893	33.723	26.135	188.6	0.198	3.35	51.3	28.6	1.94	24.8	0.06	0.08	0.27	90
	100	ISL	8.872	8.861	33.820	26.216	181.1	0.218	3.08	47.1	29.7	1.98	25.9	0.04	0.06	0.33	101
2	104		8.865	8.854	33.856	26.246	178.4	0.225	2.98	45.6	30.2	2.00	26.3	0.04	0.06	0.35	105
	125	ISL	8.778	8.765	33.958	26.339	169.9	0.262	2.61	39.9	33.5	2.13	27.6	0.03	0.05	0.26	126
2	129		8.748	8.734	33.969	26.353	168.7	0.269	2.57	39.3	34.1	2.15	27.8	0.03	0.05	0.23	130
	150	ISL	8.433	8.417	34.003	26.428	161.9	0.303	2.58	39.1	36.3	2.20	28.7	0.04	0.03	0.20	151
2	153		8.382	8.366	34.005	26.437	161.0	0.308	2.58	39.1	36.6	2.20	28.8	0.04	0.03	0.20	154
	200	ISL	7.860	7.840	34.026	26.533	152.7	0.382	2.56	38.3	41.2	2.26	30.0	0.03	0.03	0.15	202
2	206		7.793	7.773	34.029	26.545	151.6	0.391	2.56	38.3	41.8	2.27	30.2	0.03	0.03	0.14	208

RV NEW HORIZON — CRUISE SQ87 LEG II — STATION N 62

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
37 44.7 N	124 4.2 W	20/05/87	0421 GMT	3542 M	330	25 KT		1	1014.2 MB	10.3 C	9.6 C	1/8	CU

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	11	12.38	12.38	33.262	25.168	279.1		6.26	103.1	8.0	0.79	5.2	0.14	1.81	0.13	11

RV NEW HORIZON — CRUISE SQ87 LEG II — STATION N 66

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
37 45.7 N	124 16.9 W	20/05/87	0737 GMT	3683 M	340	27 KT			1013.1 MB	11.9 C	11.0 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	0	11.172	11.172	32.972 D	25.166	278.9	0.000									0
2	4	11.171	11.171	32.973	25.167	278.9	0.011	6.02	96.5	8.0	0.86	5.8	0.08	1.83	0.69	4
	10 ISL	11.172	11.171	32.971	25.166	279.2	0.028	6.02	96.5	7.9	0.85	5.8	0.08	1.96	0.39	10
2	12	11.173	11.172	32.971	25.166	279.3	0.033	6.02	96.5	7.9	0.85	5.8	0.08	2.00	0.29	12
	20 ISL	11.073	11.071	32.997	25.204	275.8	0.056	5.96	95.3	8.7	0.90	6.6	0.09	2.05	0.34	20
2	22	11.020	11.017	33.007	25.221	274.2	0.061	5.94	94.9	9.0	0.92	6.9	0.09	2.06	0.35	22
	30 ISL	10.594	10.590	33.052	25.331	263.9	0.083	5.52	87.4	10.7	1.03	8.9	0.08	1.15	0.35	30
2	32	10.473	10.469	33.067	25.364	260.9	0.088	5.39	85.1	11.2	1.06	9.5	0.07	0.88	0.35	32
2	43	10.003	9.998	33.197	25.545	243.8	0.116	4.79	74.9	14.8	1.29	13.6	0.04	0.15	0.18	43
	50 ISL	9.599	9.593	33.319	25.707	228.6	0.132	4.43	68.7	17.4	1.43	16.1	0.04	0.13	0.18	50
2	58	9.226	9.220	33.458 D	25.876	212.6	0.150									58
2	73	9.270	9.262	33.605	25.984	202.6	0.181	3.67	56.6	24.6	1.75	21.9	0.05	0.07	0.20	74
	75 ISL	9.234	9.226	33.614	25.997	201.5	0.185	3.66	56.4	25.0	1.76	22.1	0.06	0.07	0.19	76
2	88	8.941	8.932	33.665	26.084	193.4	0.211	3.63	55.6	27.1	1.82	23.2	0.09	0.06	0.15	89
	100 ISL	8.742	8.731	33.765	26.193	183.3	0.233	3.32	50.6	29.3	1.90	24.6	0.05	0.06	0.15	101
2	102	8.713	8.702	33.782	26.211	181.6	0.237	3.27	49.8	29.7	1.91	24.8	0.04	0.06	0.15	103
	125 ISL	8.439	8.426	33.835	26.295	174.0	0.278	3.23	48.9	31.9	1.98	25.7	0.03	0.04	0.12	126
2	128	8.406	8.393	33.836	26.301	173.5	0.283	3.22	48.8	32.1	1.98	25.7	0.03	0.04	0.12	129
	150 ISL	8.096	8.081	33.903	26.400	164.4	0.320	3.15	47.4	35.2	2.03	26.7	0.01	0.04	0.08	151
2	154	8.042	8.027	33.916	26.419	162.7	0.327	3.13	47.0	35.8	2.04	26.9	0.01	0.04	0.08	155
	200 ISL	7.736	7.716	34.035	26.558	150.2	0.399	2.38	35.5	44.2	2.32	27.3	0.03	0.04	0.15	202
2	206	7.696	7.676	34.051	26.576	148.6	0.408	2.28	34.0	45.3	2.36	27.4	0.03	0.04	0.16	208

RV NEW HORIZON — CRUISE SQ87 LEG II — STATION N 68

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
37 37.0 N	124 20.4 W	20/05/87	1032 GMT	3758 M	340	24 KT		2	1012.4 MB	11.9 C	10.5 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL A UG/L	PHAEO UG/L	PRESS D.BAR
2	11	11.13	11.13	32.985	25.184	277.5		5.98	95.8	7.8	0.87	6.0	0.08	2.09	0.49	11

RV NEW HORIZON — CRUISE SQ87 LEG II — STATION N 70

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
37 26.8 N	124 23.3 W	20/05/87	1157 GMT	3987 M	340	27 KT			1012.3 MB	12.3 C	11.3 C		

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL A UG/L	PHAEO UG/L	PRESS D.BAR
2	0	12.037	12.037	33.302 D	25.264	269.6	0.000									0
2	5	12.039	12.038	33.303	25.264	269.7	0.013	6.05	99.0	9.4	0.94	6.4	0.18	0.74	0.17	5
	10 ISL	12.038	12.037	33.303	25.265	269.8	0.027	6.05	99.0	9.3	0.93	6.3	0.18	0.78	0.20	10
2	13	12.037	12.035	33.303	25.265	269.9	0.035	6.05	99.0	9.3	0.93	6.3	0.18	0.80	0.22	13
	20 ISL	12.017	12.016	33.316	25.279	268.8	0.054	6.05	98.9	9.6	0.94	6.5	0.19	0.90	0.25	20
2	23	12.010	12.007	33.322	25.285	268.2	0.062	6.05	98.9	9.7	0.94	6.6	0.19	0.94	0.26	23
	30 ISL	12.004	12.000	33.328	25.291	267.8	0.081	6.07	99.2	9.8	0.95	6.8	0.19	1.04	0.27	30
2	34	12.001	11.997	33.332	25.295	267.6	0.091	6.08	99.4	10.0	0.95	7.0	0.19	1.06	0.27	34
2	43	11.748	11.743	33.347	25.354	262.2	0.115	5.93	96.4	11.0	1.02	8.0	0.23	0.88	0.26	43
	50 ISL	11.341	11.335	33.370	25.447	253.5	0.133	5.85	94.3	12.2	1.14	9.7	0.25	0.58	0.26	50
2	59	10.721	10.714	33.416	25.593	239.7	0.156	5.57	88.6	14.8	1.33	12.8	0.31	0.21	0.25	59
2	74	9.802	9.794	33.525	25.835	216.9	0.190	4.18	65.2	22.3	2.14U	19.1	0.62	0.15	0.31	75
	75 ISL	9.774	9.766	33.531	25.844	216.1	0.192	4.15	64.7	22.6	1.64	19.4	0.59	0.15	0.31	76
2	88	9.521	9.511	33.596	25.937	207.5	0.219	3.91	60.6	24.9	1.83	21.9	0.17	0.15	0.57	89
	100 ISL	9.182	9.171	33.656	26.039	198.0	0.244	3.59	55.3	27.4	1.90	23.6	0.05	0.11	0.35	101
2	104	9.068	9.057	33.677	26.073	194.8	0.252	3.48	53.4	28.3	1.92	24.0	0.04	0.09	0.26	105
	125 ISL	8.656	8.643	33.807	26.240	179.3	0.291	3.11	47.4	32.1	2.03	26.0	0.05	0.10	0.32	126
2	129	8.612	8.599	33.835	26.269	176.6	0.298	3.03	46.1	32.8	2.06	26.4	0.05	0.10	0.33	130
2	150	8.669	8.653	34.004	26.393	165.3	0.334	2.30	35.1	36.8	2.24	28.7	0.05	0.04	0.26	151
	200 ISL	7.880	7.860	34.046	26.545	151.5	0.413	2.28	34.1	43.1	2.35	30.6	0.03	0.04	0.17	202
2	202	7.848	7.828	34.048	26.552	150.9	0.416	2.28	34.1	43.4	2.35	30.7	0.03	0.04	0.17	204

RV NEW HORIZON CRUISE SQ87 LEG II STATION N 72

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
37 16.9 N	124 26.8 W	20/05/87	1423 GMT	4063 M	330	22 KT		2	1014.2 MB	11.7 C	10.6 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	13	11.84	11.84	33.204	25.225	273.7	0.036	6.12	99.6	7.8	0.87	5.7	0.14	1.31	0.34	13

RV NEW HORIZON CRUISE SQ87 LEG II STATION N 78

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
37 40.1 N	124 49.3 W	20/05/87	2211 GMT	4053 M	330	25 KT		2	1014.3 MB	13.5 C	11.2 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	11	12.13	12.13	32.784	24.845	309.8		6.27	102.5	2.9	0.48	[illegible]	[illegible]	[illegible]	0.22	11

RV NEW HORIZON CRUISE SQ87 LEG II STATION N 80

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
37 36.3 N	124 37.5 W	21/05/87	0000 GMT	4008 M	340	22 KT		2	1014.2 MB	12.5 C	10.7 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
2	11	12.12	12.12	32.812	24.868	307.6		6.41	104.7	2.8	0.48	1.5	0.05	2.95	0.28	11

RV NEW HORIZON CRUISE SQ87 LEG II STATION N 82

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
37 32.7 N	124 26.0 W	21/05/87	0134 GMT	3941 M	340	24 KT		2	1017.0 MB	11.7 C	10.0 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	11.873	11.873	32.969 D	25.036	291.3	0.000									0
2	4	11.864	11.863	32.968	25.037	291.3	0.012	6.23	101.3	5.1	0.64	3.8	0.08	1.63	0.66	4
	10 ISL	11.865	11.864	32.969	25.038	291.4	0.029	6.24	101.5	4.9	0.62	3.7	0.09	1.79	0.46	10
2	12	11.865	11.863	32.969	25.038	291.4	0.035	6.24	101.5	4.9	0.62	3.7	0.10	1.85	0.39	12
	20 ISL	11.843	11.840	32.968	25.041	291.3	0.058	6.23	101.3	4.9	0.62	3.8	0.09	1.61	0.37	20
2	22	11.837	11.834	32.968	25.042	291.2	0.064	6.23	101.3	4.9	0.62	3.8	0.09	1.55	0.37	22
	30 ISL	11.493	11.489	32.989	25.122	283.8	0.087	6.12	98.8	5.7	0.67	4.6	0.11	1.82	0.39	30
2	32	11.333	11.329	32.977	25.142	282.0	0.093	6.09	97.9	5.9	0.68	4.8	0.11	1.89	0.40	32
2	42	9.818	9.813	33.189	25.569	241.4	0.119	4.81	74.9	18.1	1.31	15.5	0.03	0.14	0.14	42
	50 ISL	9.491	9.486	33.334	25.736	225.8	0.138	4.60	71.2	19.3	1.39	17.0	0.03	0.10	0.16	50
2	58	9.165	9.159	33.376	25.822	217.8	0.155	4.40	67.6	20.5	1.47	18.6	0.03	0.07	0.17	58
2	73	9.377	9.369	33.575	25.944	206.5	0.187	3.74	57.8	24.3	1.66	21.7	0.04	0.04	0.22	74
	75 ISL	9.345	9.337	33.589	25.960	205.0	0.191	3.70	57.2	24.7	1.68	22.0	0.04	0.04	0.21	76
2	88	9.042	9.033	33.656	26.061	195.7	0.217	3.55	54.5	27.0	1.76	23.2	0.03	0.05	0.14	89
	100 ISL	8.851	8.840	33.732	26.150	187.3	0.240	3.39	51.8	29.0	1.82	24.3	0.03	0.03	0.19	101
2	103	8.806	8.795	33.750	26.172	185.4	0.246	3.36	51.3	29.5	1.83	24.5	0.03	0.03	0.20	104
	125 ISL	8.376	8.363	33.839	26.308	172.8	0.285	3.26	49.3	33.1	1.93	25.9	0.02	0.02	0.14	126
2	128	8.326	8.313	33.849	26.323	171.4	0.290	3.25	49.1	33.5	1.94	26.1	0.02	0.02	0.13	129
	150 ISL	8.273	8.258	33.937	26.401	164.4	0.327	3.04	45.9	35.5	1.98	27.0	0.03	0.01	0.10	151
2	154	8.263	8.247	33.949	26.412	163.5	0.334	3.00	45.3	35.8	1.99	27.2	0.03	0.01	0.10	155
	200 ISL	8.007	7.987	34.034	26.517	154.2	0.407	2.40	36.0	42.2	2.23	29.9	0.04	0.02	0.18	202
2	205	7.979	7.958	34.043	26.529	153.2	0.415	2.33	35.0	42.9	2.26	30.2	0.04	0.02	0.19	207

SQ87 Leg I
XBT Positions

Station	Latitude	Longitude	Date	Time(GMT)
G000	35:22.8 N	121:15.3 W	29 APR 1987	18:00
G002	38:26.3 N	123:20.8 W	30 APR 1987	17:25
G004	38:34.2 N	123:28.7 W	30 APR 1987	19:28
G006	38:41.1 N	123:36.9 W	30 APR 1987	21:00
G008	38:50.0 N	123:45.4 W	30 APR 1987	22:55
G010	38:58.4 N	123:51.2 W	1 MAY 1987	00:40
G012	39:08.5 N	123:52.8 W	1 MAY 1987	02:16
G014	39:18.5 N	123:54.1 W	1 MAY 1987	04:24
G016	39:28.9 N	123:54.2 W	1 MAY 1987	06:01
G018	39:38.9 N	123:55.5 W	1 MAY 1987	07:30
G020	39:48.0 N	124:01.7 W	1 MAY 1987	09:25
G022	39:57.0 N	124:08.2 W	1 MAY 1987	10:47
G024	40:05.0 N	124:14.2 W	1 MAY 1987	12:32
G026	40:12.8 N	124:24.7 W	1 MAY 1987	14:40
G028	40:22.2 N	124:30.6 W	1 MAY 1987	16:11
G031	40:13.9 N	124:36.8 W	1 MAY 1987	21:16
G033	40:04.2 N	124:29.6 W	1 MAY 1987	23:32
G035	39:55.6 N	124:22.0 W	2 MAY 1987	02:37
G037	39:47.1 N	124:16.6 W	2 MAY 1987	04:24
G039	39:36.7 N	124:08.8 W	2 MAY 1987	06:25
G041	40:10.6 N	124:47.9 W	2 MAY 1987	12:44
G043	39:59.8 N	124:40.9 W	2 MAY 1987	15:12
G045	39:50.8 N	124:34.1 W	2 MAY 1987	18:01
G047	39:41.9 N	124:27.8 W	2 MAY 1987	20:38
G049	39:33.1 N	124:21.2 W	2 MAY 1987	23:17
G053	39:15.1 N	124:08.2 W	3 MAY 1987	04:03
G055	39:06.5 N	124:04.5 W	3 MAY 1987	05:44
G057	38:56.4 N	124:00.0 W	3 MAY 1987	08:26
G059	38:47.2 N	123:53.9 W	3 MAY 1987	10:10
G061	38:38.7 N	123:46.0 W	3 MAY 1987	12:04
G063	38:30.1 N	123:36.1 W	3 MAY 1987	14:35
G065	38:20.4 N	123:30.1 W	3 MAY 1987	16:01
G068	38:11.3 N	123:36.8 W	3 MAY 1987	20:15
G070	38:20.9 N	123:43.3 W	3 MAY 1987	22:55
G072	38:30.0 N	123:50.2 W	4 MAY 1987	01:09
G074	38:39.8 N	123:56.8 W	4 MAY 1987	03:17
G076	38:48.8 N	124:03.9 W	4 MAY 1987	06:21
G078	38:57.9 N	124:10.6 W	4 MAY 1987	08:23
G080	39:07.4 N	124:16.9 W	4 MAY 1987	10:27
G082	39:15.6 N	124:23.2 W	4 MAY 1987	13:43
G084	39:23.8 N	124:29.8 W	4 MAY 1987	15:51
G086	39:33.1 N	124:36.0 W	4 MAY 1987	18:11
G088	39:41.4 N	124:42.9 W	4 MAY 1987	21:36
G090	39:50.2 N	124:49.2 W	4 MAY 1987	23:47
G094	39:50.8 N	125:04.6 W	5 MAY 1987	04:24
G096	39:41.9 N	124:56.8 W	5 MAY 1987	07:27
G098	39:33.0 N	124:50.7 W	5 MAY 1987	09:02
G100	39:22.3 N	124:43.0 W	5 MAY 1987	10:46
G102	39:15.0 N	124:37.5 W	5 MAY 1987	13:18
G104	39:06.0 N	124:31.3 W	5 MAY 1987	15:02
G106	38:58.6 N	124:25.1 W	5 MAY 1987	16:40
G108	38:48.1 N	124:18.6 W	5 MAY 1987	20:39
G110	38:39.7 N	124:12.0 W	5 MAY 1987	22:25
G112	38:30.1 N	124:05.1 W	6 MAY 1987	00:09
G114	38:21.0 N	123:58.9 W	6 MAY 1987	02:31
G116	38:11.1 N	123:52.0 W	6 MAY 1987	04:20
G118	38:01.8 N	123:45.3 W	6 MAY 1987	06:03
G119	37:51.9 N	123:55.1 W	6 MAY 1987	07:11
G121	38:01.4 N	124:01.3 W	6 MAY 1987	09:01
G123	38:10.6 N	124:07.6 W	6 MAY 1987	11:50
G125	38:20.4 N	124:14.5 W	6 MAY 1987	13:46
G127	38:29.7 N	124:20.2 W	6 MAY 1987	15:28
G129	38:38.9 N	124:27.2 W	6 MAY 1987	18:23
G131	38:47.2 N	124:33.5 W	6 MAY 1987	21:11

SQ87 Leg I
XBT Positions

Station	Latitude	Longitude	Date	Time(GMT)
G133	38:57.1 N	124:40.0 W	6 MAY 1987	23:08
G135	39:05.4 N	124:46.3 W	7 MAY 1987	01:45
G137	39:14.2 N	124:52.9 W	7 MAY 1987	03:31
G139	39:23.1 N	124:59.7 W	7 MAY 1987	05:19
G141	39:32.0 N	125:05.3 W	7 MAY 1987	08:30
G143	39:40.7 N	125:11.9 W	7 MAY 1987	10:18
G145	39:40.4 N	125:26.0 W	7 MAY 1987	12:44
G147	39:32.0 N	125:20.1 W	7 MAY 1987	15:11
G149	39:22.8 N	125:14.0 W	7 MAY 1987	16:53
G151	39:14.2 N	125:07.6 W	7 MAY 1987	18:33
G153	39:05.2 N	125:00.2 W	7 MAY 1987	21:28
G155	38:55.9 N	124:54.3 W	7 MAY 1987	23:06
G157	38:47.5 N	124:47.8 W	8 MAY 1987	00:44
G159	38:39.0 N	124:41.1 W	8 MAY 1987	03:24
G161	38:29.0 N	124:34.9 W	8 MAY 1987	05:07
G163	38:20.2 N	124:27.1 W	8 MAY 1987	06:59
G165	38:10.8 N	124:21.2 W	8 MAY 1987	09:46
G167	38:01.0 N	124:14.7 W	8 MAY 1987	11:32
G169	37:51.2 N	124:07.9 W	8 MAY 1987	13:21
G172	37:41.0 N	124:16.9 W	8 MAY 1987	18:06
G174	37:51.0 N	124:23.0 W	8 MAY 1987	20:26
G176	38:00.2 N	124:29.8 W	8 MAY 1987	22:57
G178	38:10.0 N	124:36.2 W	9 MAY 1987	00:45
G180	38:19.3 N	124:43.4 W	9 MAY 1987	02:38
G182	38:28.7 N	124:49.3 W	9 MAY 1987	05:38
G184	38:37.5 N	124:55.9 W	9 MAY 1987	07:22
G186	38:46.6 N	125:02.7 W	9 MAY 1987	09:06
G188	38:55.8 N	125:09.2 W	9 MAY 1987	11:50
G190	39:04.6 N	125:15.6 W	9 MAY 1987	13:34
G192	39:13.1 N	125:21.9 W	9 MAY 1987	15:12
G194	39:22.6 N	125:28.1 W	9 MAY 1987	18:02
G196	39:31.1 N	125:34.8 W	9 MAY 1987	20:14
G198	39:20.0 N	125:48.1 W	9 MAY 1987	23:43
G200	39:11.2 N	125:41.3 W	10 MAY 1987	01:31
G202	39:02.1 N	125:34.6 W	10 MAY 1987	03:24
G204	38:52.9 N	125:28.0 W	10 MAY 1987	06:46
G206	38:44.2 N	125:21.2 W	10 MAY 1987	08:36
G208	38:35.8 N	125:14.6 W	10 MAY 1987	10:12
G210	38:26.1 N	125:07.3 W	10 MAY 1987	13:10
G212	38:17.2 N	125:01.9 W	10 MAY 1987	14:55
G214	38:07.5 N	124:54.2 W	10 MAY 1987	16:55
G216	37:58.1 N	124:48.5 W	10 MAY 1987	20:21
G218	37:48.9 N	124:41.6 W	10 MAY 1987	22:15
G220	37:39.0 N	124:34.6 W	11 MAY 1987	00:08
G222	37:40.0 N	124:27.6 W	11 MAY 1987	02:56
G225	37:17.1 N	124:41.5 W	11 MAY 1987	08:40
G227	37:26.2 N	124:48.2 W	11 MAY 1987	10:36
G229	37:36.2 N	124:55.7 W	11 MAY 1987	12:42
G231	37:45.5 N	125:02.8 W	11 MAY 1987	15:18
G233	37:55.1 N	125:08.8 W	11 MAY 1987	17:18
G235	38:04.5 N	125:15.7 W	11 MAY 1987	19:49
G237	38:14.0 N	125:22.2 W	11 MAY 1987	22:27
G239	38:23.2 N	125:28.7 W	12 MAY 1987	00:24
G241	38:32.5 N	125:35.0 W	12 MAY 1987	02:24
G243	38:41.3 N	125:42.1 W	12 MAY 1987	05:06
G245	38:50.2 N	125:48.6 W	12 MAY 1987	07:03
G247	38:58.9 N	125:54.6 W	12 MAY 1987	08:47
G249	39:08.9 N	126:01.6 W	12 MAY 1987	11:46
G251	39:18.0 N	126:08.0 W	12 MAY 1987	13:45
G253	39:31.5 N	125:49.9 W	12 MAY 1987	16:28
G255	39:46.1 N	125:32.3 W	12 MAY 1987	19:20
G257	40:01.3 N	125:13.8 W	12 MAY 1987	22:17
G259	40:16.1 N	124:54.6 W	13 MAY 1987	01:15
G262	40:39.9 N	124:24.8 W	13 MAY 1987	07:23

SQ87 Leg I

XBT Temperature (°C)

	Station																	
	G000	G002	G004	G006	G008	G010	G012	G014	G016	G018	G020	G022	G024	G026	G028	G031	G033	G035
Depth (m)																		
5	13.17	11.21	10.48	10.44	10.68	10.23	11.71	11.77	11.52	11.23	10.74	10.41	10.52	10.59	10.44	10.48	10.70	11.44
10	12.98	11.18	10.37	10.22	10.37	10.20	11.61	11.77	11.32	11.14	10.70	10.35	10.48	10.53	10.21	10.10	10.59	10.76
20	12.92	10.82	10.06	9.99	9.95	10.09	10.89	11.33	10.32	10.80	10.57	10.12	10.35	10.51	9.95	9.88	10.15	9.73
30	12.51	10.20	9.64	9.73	9.52	9.82	10.44	10.60	9.92	9.99	9.84	10.01	10.02	10.45	9.53	8.92	9.65	9.49
40	11.42	9.78	9.48	9.35	9.19	9.11	9.91	10.05	9.26	9.16	9.30	9.30	9.45	10.32	9.35	8.46	9.27	9.20
50	11.34	9.19	9.03	8.73	8.99	8.60	9.44	9.10	8.87	8.84	8.95	9.27	9.23	10.10	8.96	8.27	8.58	9.12
60	11.08	8.94	8.76	8.65	8.91	8.52	9.12	8.86	8.74	8.64	8.71	9.09	9.07	9.94	8.58	8.17	8.49	8.80
70	10.98	8.80	8.56	8.49	8.71	8.45	9.02	9.02	8.65	8.52	8.61	8.89	8.86	9.73	8.36	7.97	8.33	8.66
80	10.46	8.62	8.42	8.23	8.60	8.43	8.94	8.49	8.47	8.40	8.30	8.73	8.74	9.56	8.27	7.79	8.26	8.31
90	9.83		8.39			8.41	8.77	8.45		8.33		8.63	8.74	9.14	8.23	7.67	8.12	8.01
100	9.38					8.36	8.73			8.32		8.61	8.74	9.00	8.14	7.50	8.07	7.99
110	9.22						8.68					8.53	8.42	8.68	8.00	7.45	7.97	7.89
120	9.11											8.48	8.31		7.88	7.32	7.76	7.68
130	9.05												8.28		7.83	7.24	7.61	7.57
140	8.99														7.61	7.14	7.51	7.46
150	8.94														7.58	6.95	7.40	7.30
160	8.93														7.51	6.88	7.33	7.21
170	8.80														7.41	6.83	7.23	7.10
180	8.73														7.30	6.73	7.14	7.02
190	8.70														7.28	6.63	7.05	6.99
200	8.71														7.09	6.51	6.96	6.98
220	8.64														6.76	6.24	6.74	6.82
240	8.45														6.61	6.06	6.63	6.66
260	8.33														6.41	5.95	6.47	6.40
280	8.30														6.24	5.91	6.34	6.21
300	8.21														6.16	5.80	6.18	6.07
320	7.93														6.10	5.76	6.03	5.70
340	7.61														5.98	5.74	5.91	5.60
360	7.29														5.86	5.75	5.69	5.73
380	7.02														5.75	5.73	5.51	5.64
400	6.66														5.66	5.68	5.45	5.46
420	6.39														5.62	5.61	5.39	5.39
440															5.51	5.49	5.30	5.28
460															5.43	5.45	5.23	5.15

	Station																	
	G037	G039	G041	G043	G045	G047	G049	G053	G055	G057	G059	G061	G063	G065	G068	G070	G072	G074
depth (m)																		
5	12.28	11.82	10.60	11.06	11.15	11.20	12.37	12.87	12.84	11.57	11.24	10.75	11.25	11.67	12.06	12.30	11.73	10.93
10	12.14	11.76	10.47	10.70	11.07	10.22	12.07	11.96	12.65	11.46	11.25	10.75	11.25	11.65	12.07	12.31	11.73	10.92
20	11.25	11.32	10.46	10.23	10.33	9.53	11.56	11.66	11.90	10.68	10.23	10.73	11.23	11.59	11.96	12.30	11.66	10.75
30	10.68	10.28	10.45	9.86	9.68	9.04	10.92	11.56	11.30	10.24	9.43	10.34	10.79	11.39	11.79	12.22	11.46	9.45
40	9.95	9.92	9.69	9.71	9.05	8.79	10.48	10.97	11.09	9.80	8.93	9.46	10.57	10.98	11.49	11.37	10.35	9.02
50	8.93	9.93	8.90	8.83	8.84	8.37	10.21	10.38	10.63	9.20	8.68	9.19	10.03	10.35	11.64	11.25	9.78	8.92
60	8.77	9.18	8.54	8.43	8.55	8.27	10.14	10.02	9.76	8.84	8.20	8.86	9.66	10.26	11.79	11.09	9.60	8.60
70	8.51	8.78	8.26	8.29	8.34	8.16	9.20	9.50	9.48	8.58	8.03	8.66	9.26	10.00	10.49	11.04	9.35	8.39
80	8.43	8.93	8.14	8.09	8.12	8.09	8.51	9.03	9.68	8.40	8.00	8.64	9.06	9.30	10.15	10.24	9.14	8.23
90	8.24	8.79	8.10	7.95	7.90	7.91	8.35	8.85	9.42	8.27	7.93	8.08	8.64	9.11	9.91	9.22	9.00	8.26
100	8.15	8.40	8.03	7.75	7.75	7.79	8.58	8.58	9.01	8.25	7.76	7.99	8.41	8.87	9.40	9.30	8.85	8.08
110	7.94	8.43	7.98	7.72	7.52	7.56	8.39	8.56	8.84	8.22	7.64	7.90	8.37	8.70	8.91	8.91	8.66	7.97
120	7.76	8.10	7.89	7.63	7.46	7.50	8.32	8.69	8.65	8.19	7.62	7.80	8.32	8.43	8.70	8.62	8.43	7.88
130	7.67	8.06	7.83	7.56	7.30	7.27	8.23	8.50	8.47	8.16	7.53	7.68	8.31	8.54	8.47	8.40	8.36	7.65
140	7.61	8.01	7.81	7.45	7.13	6.97	8.05	8.25	8.17	8.13	7.53	7.52	8.27	8.55	8.29	8.29	8.09	7.46
150	7.39	7.92	7.62	7.30	6.94	6.97	7.81	8.07	8.09	8.06	7.51	7.43	8.10	8.48	8.23	8.24	7.97	7.33
160	7.41	7.71	7.45	7.19	6.80	6.87	7.59	8.08	7.91	8.05	7.41	7.33	8.00	8.45	8.11	8.14	7.87	7.21
170	7.29	7.51	7.34	7.08	6.65	6.76	7.52	7.96	7.82	8.04	7.33	7.27	7.98	8.37	8.01	7.98	7.74	7.19
180	7.11	7.51	7.22	7.02	6.54	6.74	7.36	7.87	7.77	8.04	7.22	7.13	7.89	8.31	7.97	7.92	7.72	7.06
190	6.98	7.37	7.06	6.86	6.41	6.54	7.28	7.67	7.70	8.00	7.11	7.03	7.85	8.13	7.89	7.76	7.60	6.93
200	6.83	7.26	6.91	6.81	6.33	6.50	7.19	7.60	7.62	7.98	7.06	6.88		7.97	7.86	7.63	7.55	6.79
220	6.53	7.16	6.65	6.60	6.20	6.45	6.96	7.41	7.34	7.93	6.95				7.70	7.42	7.20	6.65
240	6.38	7.05	6.56	6.28	6.02	6.38	6.85	7.19	7.25	7.90	6.97				7.54	7.22	6.94	6.58
260	6.36	6.68	6.19	6.28	5.92	6.18	6.60	6.94	7.06	7.68	6.86				7.31	6.86	6.76	6.30
280	6.34	6.54	6.28	6.08	5.80	6.12	6.16	6.75	6.97	7.56	6.73				7.00	6.81	6.56	6.20
300	6.24	6.36	6.10	5.91	5.75	5.97	6.00	6.59	6.82	7.30	6.60				6.81	6.52	6.40	6.25
320	6.03	6.15	6.06	5.83	5.65	5.88	5.95	6.41	6.48	6.97	6.50				6.57	6.41	6.24	6.15
340	5.99	6.09	5.95	5.73	5.56	5.85	5.87	6.22	6.31	6.68	6.20				6.42	6.25	6.11	6.03
360	5.84	5.87	5.86	5.64	5.39	5.73	5.77	6.14	6.14	6.42	6.16				6.29	6.17	5.98	5.84
380	5.71	5.74	5.63	5.50	5.22	5.66	5.63	5.90	6.04	6.25	6.04				6.24	5.95	5.85	5.58
400	5.61	5.46	5.45	5.15	5.07	5.59	5.46	5.75	5.99	6.03	6.04				6.05	5.85	5.83	5.41
420	5.49	5.38	5.41	5.00	4.99	5.45	5.35	5.67	5.96	6.18	5.93				5.73	5.80	5.76	5.33
440	5.43	5.35	5.38	4.94	4.94	5.35	5.27	5.57	5.79	6.18	5.77				5.33	5.46	5.60	5.26
460	5.29	5.30	5.25	5.12	4.83	5.23	5.13	5.51	5.74	6.18	5.64				5.18	5.43	5.55	5.21

SQ87 Leg I

XBT Temperature (°C)

Station

depth (m)	G076	G078	G080	G082	G084	G086	G088	G090	G094	G096	G098	G100	G102	G104	G106	G108	G110	G112
5	10.49	12.15	12.52	12.18	10.84	10.85	11.08	11.11	11.54	11.30	10.97	11.78	12.47	12.58	12.42	12.27	11.17	10.89
10	10.49	12.16	12.52	12.19	10.84	10.84	11.06	11.07	11.52	11.29	10.97	11.78	12.47	12.57	12.42	12.28	11.06	10.82
20	10.47	12.13	12.52	12.20	10.84	10.84	11.02	10.56	11.24	10.75	10.95	11.79	12.46	12.56	12.42	12.15	10.82	10.81
30	10.01	11.18	12.52	12.23	10.80	10.83	10.99	9.89	10.78	10.25	10.80	11.79	12.47	12.56	12.41	12.05	10.76	10.74
40	9.37	11.33	12.51	12.33	10.33	10.01	10.37	9.40	10.20	10.11	10.39	11.90	12.47	12.56	12.41	11.97	10.71	10.71
50	8.97	10.80	12.45	12.14	10.11	9.37	9.66	8.92	9.79	9.71	9.58	11.84	12.48	12.20	11.39	11.20	10.57	10.57
60	8.74	10.10	11.73	11.65	9.63	8.74	9.16	8.63	9.21	9.32	9.34	11.67	11.78	11.53	11.19	10.47	9.82	9.40
70	8.49	9.51	11.10	11.53	9.24	8.66	8.37	8.31	8.82	9.20	9.26	10.68	11.72	11.38	11.41	10.13	9.16	9.18
80	8.39	9.68	10.90	11.30	9.20	8.38	8.17	8.12	8.67	8.90	8.84	10.12	11.26	11.29	10.98	9.22	9.02	8.90
90	8.33	9.47	9.98	10.64	8.97	8.19	8.00	7.89	8.49	8.79	8.44	9.23	10.18	10.43	10.32	9.30	8.88	8.80
100	8.14	8.71	9.46	9.71	8.77	7.91	7.88	7.72	8.38	8.51	8.27	8.90	9.45	9.76	9.66	9.51	8.73	8.70
110	8.14	8.60	8.79	8.88	8.55	7.79	7.75	7.62	8.19	8.27	8.11	8.75	9.52	9.48	9.33	9.12	8.49	8.37
120	8.07	8.23	8.64	8.76	8.48	7.72	7.57	7.48	8.08	8.24	7.97	8.69	9.25	9.11	8.87	8.56	8.30	8.10
130	8.00	8.17	8.29	8.78	8.25	7.69	7.34	7.30	7.89	8.06	7.88	8.76	9.35	9.01	8.41	8.44	8.12	8.04
140	7.97	7.99	8.19	8.48	8.10	7.55	7.18	7.17	7.67	7.91	7.82	8.48	9.05	8.85	8.17	8.36	7.97	7.95
150	7.72	7.95	8.10	8.24	7.86	7.32	6.99	7.05	7.54	7.77	7.68	8.57	8.75	8.71	7.96	8.19	7.84	7.76
160	7.75	7.95	8.15	8.03	7.80	7.25	6.84	6.96	7.39	7.68	7.49	8.49	8.59	8.34	7.81	8.12	7.74	7.51
170	7.75	7.94	8.03	7.87	7.67	7.06	6.79	6.91	7.24	7.52	7.42	8.08	8.41	8.24	7.86	8.12	7.60	7.55
180	7.68	7.89	7.98	7.72	7.50	6.97	6.69	6.87	7.12	7.39	7.41	7.95	8.15	8.15	7.88	8.07	7.34	7.36
190	7.68	7.87	7.84	7.69	7.42	6.83	6.51	6.82	6.98	7.23	7.33	7.98	8.19	8.05	7.67	8.08	7.24	7.26
200	7.37	7.74	7.70	7.56	7.35	6.69	6.37	6.77	6.78	7.07	7.25	7.90	8.02	7.90	7.58	8.06	7.20	7.16
220	7.40	7.69	7.39	7.29	7.18	6.53	6.29	6.65	6.66	6.83	7.07	7.73	7.67	7.71	7.42	7.90	6.90	6.95
240	7.31	7.61	7.19	7.13	7.03	6.46	6.24	6.49	6.50	6.68	6.84	7.48	7.40	7.53	7.31	7.75	6.65	6.61
260	7.06	7.46	7.04	7.06	6.82	6.39	6.15	6.34	6.30	6.51	6.64	7.21	7.15	7.39	7.13	7.51	6.59	6.49
280	6.99	7.14	6.93	6.49	6.50	6.24	6.02	6.21	6.14	6.29	6.45	6.79	7.04	7.19	6.85	7.14	6.44	6.23
300	6.74	6.82	6.82	6.17	6.34	6.15	5.96	6.10	6.06	6.11	6.27	6.71	6.66	6.90	6.69	6.85	6.38	6.10
320	6.69	6.70	6.78	6.12	6.22	6.03	5.83	5.91	5.98	5.86	6.06	6.48	6.54	6.65	6.48	6.63	6.21	5.97
340	6.42	6.59	6.64	6.14	6.08	5.88	5.63	5.78	5.88	5.78	5.87	6.30	6.38	6.36	6.25	6.48	5.95	5.87
360	6.15	6.42	6.38	6.01	5.92	5.83	5.62	5.66	5.74	5.67	5.73	6.16	6.26	6.15	6.16	6.31	5.93	5.86
380	6.04	6.28	6.05	5.75	5.77	5.62	5.48	5.60	5.63	5.62	5.63	6.10	6.17	6.00	6.11	6.14	5.77	5.61
400	5.99	6.20	5.89	5 73	5.63	5.45	5.37	5.44	5.50	5.49	5.50	6.03	5.95	5.90	6.03	6.04	5.47	5.50
420	5.81	6.13	5.81	5.60	5.44	5.22	5.29	5.35	5.40	5.39	5.39	5.97	5.89	5.52	5.83	5.90	5.35	5.29
440	5.62	6.01	5.64	5.52	5.34	5.10	5.18	5.28	5.23	5.33	5.30	5.62	5.67	5.54	5.71	5.80	5.32	5.35
460	5.69	5.82	5.50	5.35	5.28	4 99	5.10	5.21	5.18	5.23	5.30	5.50	5.52	5.52	5.54	5.70	5.25	5.23

Station

depth (m)	G114	G116	G118	G119	G121	G123	G125	G127	G129	G131	G133	G135	G137	G139	G141	G143	G145	G147
5	11.77	12.72	12.65	12.63	12.86	13.02	12.32	12.18	12.81	13.00	13.21	13.40	13.35	13.18	12.62	12.18	13.29	13.26
10	11.77	12.71	12.64	12.63	12.86	13.02	12.32	12.16	12.70	12.79	13.13	13.38	13.35	13.17	12.63	12.16	13.28	13.25
20	11.68	12.56	12.64	12.62	12.85	13.01	12.32	12.13	12.62	12.63	12.85	13.07	13.16	13.14	12.92	12.18	13.28	13.24
30	11.50	12.52	12.43	12.49	12.75	12.86	12.31	12.10	12.54	12.65	12.81	13.02	13.10	13.12	12.87	12.71	13.04	13 24
40	11.43	12.53	12.41	12.42	12.67	12.82	12.26	11.58	12.47	12.64	12.80	12.87	12.83	12.72	12.42	12.23	12.63	12.66
50	11.35	12.27	12.09	11.96	12.34	11.59	11.69	10.50	11.62	12.52	12.76	12.10	12.44	12.47	11.72	11.45	12.48	12.36
60	10.98	11.92	11.83	11.26	11.86	11.44	11.51	10.30	11.18	11.54	11.74	11.49	94	11.91	11.55	11.20	12.05	11.76
70	10.38	11.85	11.74	10.90	11.67	11.53	11.33	10.27	11.05	11.39	11.72	10.86	11.84	11.90	11.06	10.72	11.76	11.62
80	9.76	11.01	11.60	10.73	11.83	10.92	10.53	9.78	10.76	11.06	11.68	10.14	11.29	11.75	11.04	9.70	11.56	10.77
90	9.09	10.25	10.50	9.81	11.68	10.59	10.13	8.92	10.09	10.36	10.98	9.70	10.29	10.29	9.65	9.20	10.42	10.27
100	9.44	9.76	9.79	9.35	10.47	10.03	9.26	8.82	9.61	10.06	9.60	9.26	9.89	9.63	9.28	8.78	10.03	9.73
110	9.22	9.52	9.39	9.08	9.64	9.60	9.01	9.01	8.78	9.75	9.00	9.04	9.84	9.54	8.74	8.50	9.69	9.50
120	9.03	9.18	9.15	8.88	9.23	9.45	8.93	8.79	8.51	9.24	8.90	8.92	9.56	9.27	8.60	8.47	9.41	9.37
130	8.86	8.87	8.97	8.72	9.06	9.19	8.95	8.75	8.35	8.77	8.70	8.86	8.97	9.15	8.22	8.65	9.37	9.17
140	8.73	8.63	8.70	8.59	8.90	8.97	8.78	8.66	8.36	8.41	8.62	8.78	8.77	8.91	8.12	8.18	9.17	8.99
150	8.61	8.58	8.57	8.36	8.90	8.83	8.68	8.31	8.49	8.27	8.52	8.67	8.56	8.61	7.89	8.20	8.65	8.86
160	8.58	8.32	8.36	8.23	8.70	8.72	8.46	8.19	8.56	8.07	8.41	8.60	8.41	8.45	7.82	8.23	8.43	8.73
170	8.46	8.07	8.09	8.09	8.51	8.59	8.29	8.11	8.39	8.03	8.32	8.58	8.21	8.25	7.68	8.10	8.54	8.49
180	8.11	7.87	7.97	8.03	8.07	8.53	8.08	7.85	8.33	7.88	8.23	8.51	8.18	8.21	7.60	7.93	8.39	8.26
190	7.93	7.80	7.84	7.94	7.92	8.30	8.02	7.88	8.16	7.85	8.21	8.40	8.22	8.07	7.48	7.76	8.40	8.25
200	7 79	7.72	7.71	7.92	7.96	8.21	7.92	7.62	7.98	8.04	8.06	8.37	7.94	7.84	7.42	7.67	8.16	7.97
220	7.54	7.46	7.51	7.58	7.60	7.99	7.64	7.39	7.78	7.78	7.92	8.28	7.72	7.50	7.13	7.47	7.79	7.65
240	7.40	7.10	7.13	7.29	7.31	7.65	7.27	7.28	7.59	7.58	7.67	8.06	7.49	7.35	6 98	7.20	7.41	7.44
260	6.92	7.10	6.76	7.05	7.08	7.31	7.17	7.08	7.16	7.38	7.42	7.93	7.25	7.22	6.66	6.89	7.19	7.22
280	6.70	6.76	6.63	6.82	6.85	6.95	6.96	6.83	6.97	7.12	7.25	7.77	7.08	6.85	6.47	6.67	6.92	7.05
300	6.46	6.45	6.65	6.60	6.63	6.59	6.68	6.55	6.69	6.84	7.08	7.58	6.83	6.62	6.30	6.44	6.72	6.82
320	6.31	6.33	6 40	6.39	6.51	6.63	6.47	6.43	6.39	6.72	6.88	7.36	6.62	6.36	6.14	6.13	6.45	6.63
340	6.12	6.15	6.30	6.37	6.30	6.53	6.21	6.17	6.13	6.61	6.70	7 07	6.41	6.26	5.99	6.00	6.25	6.37
360	5.79	5 98	6 18	6.15	5 91	6.36	6.11	6.15	5.95	6.33	6.36	6.89	6.41	5.98	5.84	5.86	6.04	6.13
380	5 51	5.96	6 08	6.00	6.01	6.13	6.01	5.95	5.96	6.15	6.18	6.64	6.29	5.88	5.66	5.84	5.96	6.02
400	5 37	5.87	5.95	5.95	5.83	6.08	5.68	5.81	5.75	6.13	5.92	6.47	6.11	5.89	5.53	5.65	5.81	5.83
420	5 30	5.80	5 79	5.99	5.72	5.97	5.34	5 70	5.41	6.03	5.87	6.26	5.90	5.70	5.35	5.56	5.73	5.74
440	5 13	5 68	5.70	5.87	5 78	5.94	5.23	5 53	5 34	5.78	5.60	5 80	5.69	5.65	5 20	5.29	5 58	5.57
460	5 09	5 59	5 51	5.61	5 74	5 79	5.15	5.28	5.50	5.47	5.53	5.75	5.63	5.50	5.06	5 23	5.40	5.33

SQ87 Leg I

XBT Temperature (°C)

	Station																	
	G149	G151	G153	G155	G157	G159	G161	G163	G165	G167	G169	G172	G174	G176	G178	G180	G182	G184
depth (m)																		
5	13.33	13.30	13.50	13.33	13.46	13.23	13.11	13.36	13.10	13.24	13.32	13.48	13.59	13.46	13.48	13.77	13.82	14.00
10	13.30	13.20	13.32	13.14	13.06	12.89	12.96	13.12	12.76	13.22	13.06	13.46	13.39	13.16	13.18	13.63	13.37	13.56
20	13.29	13.14	13.26	12.85	12.88	12.67	12.65	12.59	12.25	12.98	12.87	12.93	13.11	13.04	13.11	13.47	12.90	13.00
30	13.28	13.05	13.10	12.77	12.75	12.63	12.52	12.46	12.24	12.96	12.74	12.78	13.16	13.07	13.00	13.50	12.99	12.96
40	12.95	12.98	13.06	12.68	12.69	12.62	12.40	12.40	12.18	12.77	12.75	12.53	13.03	12.98	12.73	13.35	13.02	12.93
50	12.77	12.48	12.96	11.63	11.55	12.51	11.71	12.16	12.33	12.26	12.77	12.50	12.85	12.90	12.05	13.08	13.36	13.54
60	12.54	12.23	12.47	11.41	11.09	11.89	11.62	11.50	11.66	11.60	12.55	11.92	12.04	12.58	11.97	12.82	12.05	13.08
70	11.96	11.66	11.48	10.81	11.08	11.51	11.60	11.49	11.66	11.38	12.04	11.79	11.54	11.83	11.81	12.46	11.33	12.18
80	11.71	11.72	11.21	10.44	10.79	11.47	11.31	11.02	11.35	11.26	11.66	11.79	11.34	11.66	11.75	11.94	11.96	11.52
90	10.90	10.98	11.03	10.10	10.53	10.91	10.53	10.37	10.41	10.82	11.35	11.81	10.88	11.48	11.10	11.41	11.65	11.43
100	9.75	10.20	10.32	9.75	10.00	10.41	10.17	10.08	9.55	9.79	10.75	10.53	10.83	10.67	10.96	10.93	11.14	10.79
110	9.69	9.74	9.77	9.38	9.72	9.81	9.68	9.41	9.10	9.68	9.62	10.34	10.64	10.31	10.66	10.88	10.89	10.47
120	9.62	9.63	9.56	9.13	9.55	9.34	9.43	9.00	9.36	9.67	9.33	9.66	10.37	10.39	10.51	10.71	10.54	10.18
130	9.55	9.56	9.12	8.97	9.24	9.04	9.23	8.57	9.22	9.50	9.10	9.45	10.07	10.19	10.35	10.52	10.15	9.92
140	9.40	9.39	8.76	8.80	9.01	8.71	9.08	8.61	8.94	9.30	9.00	9.04	9.85	9.97	10.21	10.34	10.18	9.72
150	9.18	9.05	8.74	8.67	8.75	8.52	8.82	8.77	8.72	9.07	8.92	8.84	9.70	9.75	10.01	10.14	9.78	9.58
160	9.02	8.96	8.55	8.59	8.63	8.32	8.69	8.63	8.71	8.90	8.89	8.66	9.57	9.55	9.84	9.92	9.60	9.31
170	8.76	8.77	8.33	8.41	8.55	8.11	8.63	8.41	8.80	8.73	8.70	8.54	9.36	9.35	9.65	9.71	9.40	9.06
180	8.55	8.47	8.16	8.27	8.28	8.02	8.50	8.33	8.70	8.84	8.52	8.42	9.17	9.21	9.43	9.57	9.19	8.85
190	8.47	8.32	8.18	8.20	8.09	7.84	8.34	8.29	8.51	8.56	8.35	8.21	8.94	9.09	9.27	9.41	9.01	8.74
200	8.40	8.03	8.14	8.16	7.88	7.58	8.16	8.11	8.35	8.52	8.11	8.00	8.79	8.92	9.06	9.20	8.89	8.60
220	8.20	7.80	7.77	7.93	7.74	7.64	7.90	7.86	8.12	8.13	7.96	7.85	8.62	8.60	8.79	9.01	8.66	8.34
240	7.77	7.67	7.55	7.75	7.57	7.41	7.61	7.56	7.83	7.74	7.70	7.59	8.30	8.34	8.52	8.72	8.38	8.10
260	7.51	7.38	7.30	7.62	7.28	7.08	7.36	7.30	7.60	7.66	7.38	7.36	7.93	8.08	8.24	8.26	8.06	7.79
280	7.26	7.09	7.06	7.39	7.09	6.94	7.02	7.19	7.31	7.39	7.17	7.17	7.68	7.82	8.04	8.00	7.92	7.53
300	7.01	6.73	6.90	7.09	6.83	6.63	6.87	7.05	7.00	7.07	7.02	6.98	7.43	7.65	7.76	7.77	7.83	7.43
320	6.84	6.57	6.58	6.79	6.71	6.53	6.70	6.82	6.78	6.82	6.83	6.71	7.34	7.46	7.53	7.49	7.37	7.23
340	6.57	6.43	6.43	6.66	6.57	6.36	6.47	6.55	6.54	6.58	6.58	6.80	6.94	7.25	7.25	7.36	7.20	7.02
360	6.34	6.18	6.18	6.34	6.33	6.24	6.35	6.32	6.31	6.47	6.54	6.46	6.65	7.24	7.12	7.19	6.93	6.69
380	6.15	6.00	6.10	6.06	6.21	6.14	6.16	6.29	6.19	6.32	6.28	6.16	6.49	6.74	7.00	6.99	6.80	6.62
400	6.00	5.88	6.01	5.82	6.06	5.95	6.05	6.10	6.12	6.28	5.91	5.99	6.29	6.57	6.77	6.81	6.63	6.57
420	5.78	5.76	5.97	5.52	5.84	5.97	5.93	6.06	5.90	5.91	5.66	5.86	6.16	6.47	6.60	6.61	6.38	6.33
440	5.61	5.62	5.75	5.63	5.40	5.81	5.73	5.64	5.83	5.71	5.56	5.55	5.95	6.30	6.43	6.33	6.21	6.22
460	5.51	5.59	5.43	5.55	5.32	5.79	5.74	5.49	5.67	5.71	5.38	5.41	5.81	6.09	6.29	6.16	6.06	6.04

	Station																	
	G186	G188	G190	G192	G194	G196	G198	G200	G202	G204	G206	G208	G210	G212	G214	G216	G218	G220
depth (m)																		
5	13.68	13.75	14.04	13.96	13.94	14.28	14.12	14.06	14.07	13.76	13.93	14.08	13.74	13.52	13.63	13.46	13.38	13.44
10	13.55	13.48	13.50	13.82	13.45	14.20	13.91	14.02	14.0:	13.76	13.67	14.09	13.73	13.53	13.62	13.44	13.37	13.42
20	13.11	13.15	13.40	13.41	13.36	13.61	13.41	13.47	13.40	13.07	13.39	13.69	13.26	13.45	13.62	13.39	13.37	13.41
30	12.92	13.01	13.42	13.30	12.82	13.44	12.80	13.35	13.22	13.15	13.28	13.37	13.19	13.11	13.13	13.07	13.31	13.41
40	13.00	12.88	13.62	13.09	12.57	13.30	12.52	13.00	13.08	12.88	13.13	13.34	13.02	13.07	13.01	12.97	12.97	13.11
50	13.05	12.36	13.78	12.60	12.30	12.38	12.31	12.77	12.95	12.47	13.48	12.90	12.69	12.79	12.81	12.48	12.83	12.63
60	12.79	11.91	13.51	12.12	12.07	12.29	11.78	12.16	12.25	11.14	13.20	12.43	11.76	12.66	12.42	11.77	12.66	12.48
70	12.04	11.59	12.38	11.63	11.53	11.72	11.42	11.69	11.32	10.63	12.68	11.92	11.44	11.76	11.56	10.80	11.08	11.61
80	11.41	11.39	12.28	11.65	11.00	11.58	10.92	11.65	11.07	9.94	11.71	11.77	11.38	11.32	11.13	11.12	11.06	11.39
90	11.43	10.88	11.91	10.73	10.24	10.94	10.21	10.98	10.59	9.84	11.26	11.48	11.14	11.25	10.95	10.99	10.87	11.05
100	10.54	10.26	11.31	10.10	9.90	10.33	9.93	10.17	10.26	9.60	10.79	10.98	10.82	10.91	10.80	10.91	10.82	10.84
110	10.47	9.56	10.84	9.89	9.84	9.97	9.88	9.90	9.75	9.17	10.36	10.68	10.53	10.83	10.71	10.81	10.50	10.45
120	10.01	9.47	10 65	9.75	9.72	9.70	9.75	9.74	9.38	9.02	10.23	10.42	10.26	10.69	10.63	10.60	10.33	10.19
130	9.76	9.27	10.47	9.62	9.58	9.47	9.65	9.64	9.21	8.78	10.05	10.11	10.02	10.57	10.58	10.36	10.15	9.91
140	9.49	9.02	10.29	9.43	9.41	9.32	9.58	9.52	8.99	8.65	9.73	10.01	9.89	10.29	10.43	10.21	10.00	9.69
150	9.10	9.04	10.33	9.18	9.23	9.10	9.43	9.38	8.72	8.95	9.16	9.83	9.74	10.03	10.35	10.00	9.84	9.49
160	9.07	8.67	10.19	9.03	9.07	8.90	9.32	9.30	8.59	8.78	8.84	9.49	9.30	9.85	10.25	9.85	9.63	9.23
170	8.67	8.69	10.02	8.90	8.80	8.76	9.17	9.07	8.49	8.66	8.72	9.37	9.12	9.70	10.08	9.63	9.47	9.05
180	8.42	8.57	9.69	8.83	8.56	8.57	9.06	8.94	8.40	8.56	8.63	9.24	8.99	9.56	9.89	9.50	9.27	8.92
190	8.32	8.34	9.56	8.62	8.32	8.43	8.91	8.72	8.26	8.51	8.14	9.14	8.82	9.35	9.75	9.40	9.19	8.66
200	8.19	8.08	9.33	8.51	8.01	8.26	8.79	8.61	7.97	8.30	8.28	8.97	8.73	9.23	9.60	9.26	8.93	8.59
220	7.92	7.84	8.94	8.09	7.82	8.00	8.56	8.25	7.89	8.01	8.16	8.54	8.57	8.89	9.23	9.00	8.66	8.18
240	7 68	7.56	8.62	7.88	7.57	7.69	8.20	7.99	7.73	7.86	7.80	8.33	8.24	8.77	8.93	8.66	8.42	8.05
260	7.37	7.37	8.36	7.70	7.38	7.52	7.97	7.74	7.40	7.61	7.72	8.16	7.97	8.56	8.60	8.40	8.22	7.79
280	7.11	7.05	7.99	7.43	7.20	7.22	7.80	7.56	7.12	7.40	7.64	7.97	7.74	8.17	8.45	8.24	7.92	7.60
300	6.86	7.00	7.79	7.25	7.09	7.05	7.62	7.41	6.84	6.98	7.27	7.64	7.51	7.96	8.20	7.72	7.83	7.40
320	6.52	6 75	7.47	7.03	6.92	6.97	7.39	7.28	6.64	6.82	7.18	7.25	7.35	7.73	7.85	7.53	7.67	7.22
340	6.16	6.55	7.21	6.79	6.65	6.73	7.34	6.95	6.41	6.82	6.90	7.15	7.03	7.43	7.56	7.41	7.30	7.02
360	6.10	6.45	7.10	6.72	6.60	6.50	7.14	6.75	6.33	6.39	6.65	6.66	7.01	7.28	7.31	7.17	7.12	6.80
380	6.06	6.13	7.11	6.59	6.43	6.30	6.99	6.71	6.36	6.32	6.29	6.52	6.95	7.09	7.16	6.93	6.83	6.59
400	5 84	5.95	6.92	6.37	6.23	6.25	6.81	6.50	6.14	6.06	6.18	6.29	6.77	6.89	7.04	6.78	6.79	6.44
420	5.73	5.77	6.93	6.19	6.10	6.24	6.72	6.43	6.03	5.98	6.09	6.34	6.52	6.73	6.83	6.61	6.65	6.20
440	5.68	5.57	6.50	6.02	5.89	6.11	6.57	6.31	5.92	5.84	5.92	6.12	6.22	6.52	6.57	6.42	6.35	6.14
460	5.53	5.72	6.37	5.74	5.82	5.98	6.35	6.08	5.80	5.92	5.85	5.96	6.10	6.34	6.46	6.15	6.25	5.98

SQ87 Leg I

XBT Temperature (°C)

	Station																	
	G222	G225	G227	G229	G231	G233	G235	G237	G239	G241	G243	G245	G247	G249	G251	G253	G255	G257
depth(m)																		
5	13.43	13.36	13.29	13.29	13.31	13.31	13.36	13.88	14.31	14.07	13.84	13.76	13.68	13.95	14.06	13.99	14.03	12.69
10	13.42	13.36	13.28	13.29	13.30	13.31	13.36	13.88	14.30	14.08	13.83	13.74	13.68	13.94	14.06	13.97	13.91	12.40
20	13.39	13.35	13.28	13.29	13.30	13.31	13.28	13.85	14.28	14.08	13.83	13.73	13.67	13.93	14.03	13.95	13.78	12.24
30	13.24	13.20	12.91	11.79	13.30	13.30	13.37	13.92	14.29	14.06	13.85	13.10	13.24	13.76	13.83	13.82	13.14	11.92
40	12.53	12.17	11.88	11.70	13.14	11.93	13.39	13.99	14.00	13.81	13.99	12.94	13.01	12.75	12.87	13.25	12.40	9.94
50	12.30	12.14	11.92	12.51	12.67	11.34	12.19	13.55	12.60	13.39	13.65	12.43	12.75	12.57	12.67	12.62	11.85	9.20
60	12.36	11.38	12.30	12.67	12.32	11.11	11.21	12.98	12.14	11.95	12.85	11.54	11.88	12.37	12.35	12.44	11.83	8.81
70	11.85	11.34	11.86	12.04	11.34	11.14	11.07	12.17	11.84	11.74	12.07	11.28	11.38	11.77	11.69	11.97	11.46	8.44
80	11.68	11.18	11.68	11.59	11.19	10.73	12.15	11.99	11.42	11.65	11.24	10.43	10.74	11.67	11.01	11.84	10.68	8.27
90	11.16	11.38	10.75	10.76	11.31	10.64	11.21	11.46	11.21	11.27	10.77	9.87	10.25	11.04	10.51	11.12	10.28	8.01
100	10.05	11.13	10.67	10.36	10.85	10.08	10.64	10.78	10.58	10.23	10.26	9.63	9.63	10.22	10.15	10.26	9.74	7.92
110	9.25	10.56	10.20	10.19	10.52	10.25	10.17	9.99	9.28	9.79	9.89	9.62	9.29	9.90	10.05	9.92	9.10	7.82
120	9.12	10.23	10.11	9.98	10.22	10.26	9.98	9.79	9.83	9.74	9.92	10.05	8.96	9.76	9.99	9.77	8.98	7.70
130	8.89	9.84	9.84	9.74	9.94	9.95	9.49	9.66	9.68	9.62	9.61	9.85	8.86	9.58	9.90	9.68	8.96	7.59
140	8.74	9.66	9.69	9.48	9.67	9.49	9.34	9.49	9.04	9.44	9.37	9.21	8.69	9.41	9.83	9.60	8.75	7.52
150	8.82	9.47	9.57	9.29	9.63	9.42	9.11	9.17	9.20	9.21	9.18	9.00	8.57	9.29	9.74	9.38	8.39	7.44
160	8.82	9.33	9.49	9.15	9.46	9.26	9.00	8.97	9.08	8.96	8.83	8.71	8.42	9.10	9.61	9.19	8.30	7.30
170	8.57	9.22	9.28	9.02	9.23	9.14	8.87	8.67	8.94	8.65	8.33	8.68	8.30	8.98	9.52	9.07	8.26	7.08
180	8.49	8.92	9.04	8.93	8.96	8.99	8.72	8.45	8.33	8.68	8.20	8.57	8.16	8.88	9.45	8.94	8.14	6.93
190	8.34	8.75	8.88	8.83	8.79	8.89	8.61	8.35	8.04	8.22	8.03	8.44	8.04	8.78	9.42	8.76	8.04	6.78
200	8.26	8.49	8.78	8.66	8.70	8.78	8.44	8.13	7.90	8.05	8.23	8.39	7.98	8.57	9.34	8.63	7.86	6.66
220	8.09	8.35	8.57	8.42	8.36	8.53	8.23	7.80	7.71	7.69	7.94	8.19	7.83	8.42	9.22	8.39	7.60	6.53
240	7.81	8.13	8.34	8.11	8.06	8.43	8.09	7.56	7.52	7.45	7.76	7.98	7.52	8.10	9.05	8.22	7.25	6.27
260	7.18	7.93	7.95	7.89	7.90	8.23	7.82	7.34	7.28	7.38	7.51	7.80	7.22	7.94	8.83	7.99	7.02	6.16
280	6.97	7.73	7.77	7.72	7.74	7.91	7.73	7.13	7.01	7.16	7.37	7.45	7.18	7.80	8.50	7.86	6.89	5.99
300	6.93	7.40	7.45	7.51	7.58	7.65	7.31	6.82	6.80	6.97	7.21	7.35	7.04	7.61	8.19	7.70	6.62	5.96
320	6.53	7.23	7.22	7.21	7.38	7.38	7.05	6.59	6.60	6.87	6.52	7.22	6.82	7.43	7.97	7.51	6.49	5.89
340	6.37	7.06	7.00	6.99	7.18	7.24	6.87	6.37	6.38	6.69	6.26	6.94	6.58	7.19	7.58	7.11	6.35	5.76
360	6.12	6.89	6.91	6.74	6.98	6.98	6.67	6.03	6.04	6.49	6.00	6.69	6.41	7.01	7.31	7.00	6.11	5.71
380	6.16	6.69	6.76	6.63	6.87	6.67	6.17	5.96	5.97	6.30	5.81	6.59	6.09	6.76	7.12	6.89	5.97	5.64
400	5.98	6.43	6.63	6.52	6.47	6.41	6.15	6.10	6.20	6.11	5.62	6.41	5.99	6.44	6.87	6.75	5.86	5.53
420	5.83	6.32	6.53	6.41	6.28	6.10	6.24	5.91	6.13	6.06	5.45	6.21	5.92	6.32	6.70	6.67	5.69	5.38
440	5.56	6.11	6.36	6.12	6.15	6.16	6.05	5.90	5.79	5.85	5.31	6.03	5.72	6.12	6.54	6.48	5.57	5.19
460	5.43	5.96	6.03	5.90	6.00	5.90	5.97	5.83	5.68	5.68	5.24	5.81	5.79	6.02	6.36	6.35	5.43	5.08

	Station	
	G259	G262
depth(m)		
5	10.81	12.13
10	10.72	12.11
20	10.25	10.10
30	9.79	9.58
40	9.34	9.21
50	8.89	
60	8.68	
70	8.42	
80	8.13	
90	8.01	
100	7.86	
110	7.71	
120	7.63	
130	7.56	
140	7.40	
150	7.30	
160	7.27	
170	7.27	
180	7.23	
190	7.17	
200	7.15	
220	6.84	
240	6.60	
260	6.53	
280	6.34	
300	5.91	
320	5.56	
340	5.46	
360	5.27	
380	5.11	
400	5.12	
420	5.07	
440	4.89	
460	4.85	

SQ87 Leg II
XBT Positions

Station	Latitude	Longitude	Date	Time(GMT)
N2	40:24.6 N	124:43.0 W	15 MAY 1987	00:51
N3	40:18.7 N	124:42.0 W	15 MAY 1987	01:27
N4	40:11.6 N	124:41.0 W	15 MAY 1987	02:06
N5	40:05.8 N	124:40.1 W	15 MAY 1987	02:35
N6	39:57.1 N	124:38.8 W	15 MAY 1987	03:28
N7	39:52.1 N	124:38.1 W	15 MAY 1987	03:57
N8	39:47.3 N	124:37.1 W	15 MAY 1987	04:20
N9	39:40.9 N	124:36.0 W	15 MAY 1987	04:57
N10	39:37.2 N	124:34.7 W	15 MAY 1987	05:18
N11	39:30.1 N	124:33.9 W	15 MAY 1987	05:53
N17	38:13.3 N	123:21.1 W	15 MAY 1987	21:29
N18	38:09.8 N	123:18.4 W	15 MAY 1987	21:50
N19	38:06.7 N	123:16.3 W	15 MAY 1987	22:03
N20	38:03.2 N	123:13.9 W	15 MAY 1987	22:26
N21	37:59.4 N	123:11.4 W	15 MAY 1987	22:47
N22	37:55.2 N	123:08.6 W	15 MAY 1987	23:19
N23	37:52.5 N	123:06.9 W	15 MAY 1987	23:33
N24	37:47.8 N	123:03.8 W	16 MAY 1987	00:04
N25	37:56.9 N	122:53.0 W	16 MAY 1987	19:17
N27	37:42.4 N	123:21.7 W	17 MAY 1987	17:46
N29	37:49.1 N	123:25.9 W	17 MAY 1987	19:19
N31	37:56.2 N	123:30.6 W	17 MAY 1987	21:03
N33	38:03.2 N	123:35.6 W	17 MAY 1987	22:26
N35	38:10.6 N	123:40.4 W	18 MAY 1987	00:36
N36	38:14.1 N	123:42.6 W	18 MAY 1987	01:20
N53	38:03.8 N	123:42.4 W	19 MAY 1987	20:13
N55	38:07.8 N	123:53.2 W	19 MAY 1987	22:10
N57	38:06.4 N	123:59.0 W	19 MAY 1987	23:49
N59	37:58.5 N	123:59.5 W	20 MAY 1987	01:14
N61	37:50.6 N	124:00.0 W	20 MAY 1987	02:57
N63	37:47.4 N	124:07.3 W	20 MAY 1987	05:11
N64	37:50.9 N	124:12.1 W	20 MAY 1987	06:12
N65	37:46.4 N	124:16.2 W	20 MAY 1987	07:16
N67	37:41.7 N	124:18.1 W	20 MAY 1987	09:29
N69	37:32.0 N	124:21.6 W	20 MAY 1987	11:12
N71	37:22.0 N	124:24.7 W	20 MAY 1987	13:38
N73	37:20.8 N	124:33.5 W	20 MAY 1987	17:24
N74	37:24.9 N	124:36.8 W	20 MAY 1987	18:20
N76	37:29.5 N	124:40.2 W	20 MAY 1987	19:46
N77	37:34.0 N	124:43.7 W	20 MAY 1987	20:40
N79	37:38.5 N	124:43.1 W	20 MAY 1987	23:12
N81	37:34.8 N	124:31.2 W	21 MAY 1987	00:47
N83	37:31.1 N	124:19.8 W	21 MAY 1987	04:12
N85	37:26.9 N	124:06.3 W	21 MAY 1987	06:29
N86	37:22.8 N	124:11.2 W	21 MAY 1987	07:04
N87	37:19.0 N	124:15.1 W	21 MAY 1987	07:33
N88	37:15.1 N	124:19.6 W	21 MAY 1987	08:01
N89	37:11.2 N	124:24.0 W	21 MAY 1987	08:29
N90	37:07.1 N	124:28.5 W	21 MAY 1987	08:59
N92	36:59.2 N	124:37.2 W	21 MAY 1987	09:59
N93	36:55.2 N	124:42.0 W	21 MAY 1987	10:29
N94	36:51.2 N	124:46.3 W	21 MAY 1987	10:57
N95	36:47.0 N	124:50.5 W	21 MAY 1987	11:24
N96	36:43.5 N	124:45.1 W	21 MAY 1987	12:01
N97	36:40.3 N	124:41.1 W	21 MAY 1987	12:25
N98	36:37.4 N	124:35.3 W	21 MAY 1987	12:53

SQ87 Leg II

XBT Temperature (°C)

	Station																	
	N2	N3	N4	N5	N6	N7	N8	N9	N10	N11	N17	N18	N19	N20	N21	N22	N23	N24
depth(m)																		
5	11.17	11.92	11.63	12.78	12.92	13.10	13.00	13.07	13.08	12.68	10.11	10.26	10.80	10.70	11.05	11.05	10.93	11.40
10	11.07	11.82	11.61	12.77	12.87	13.08	13.00	13.06	13.07	12.67	10.10	10.25	10.78	10.71	11.04	11.03	10.94	11.39
20	10.23	10.90	11.21	12.76	12.48	12.42	12.87	12.91	12.60	12.71	10.08	10.24	10.78	10.72	11.03	10.98	10.90	10.59
30	10.17	10.44	11.03	12.64	10.25	11.59	11.13	11.67	10.28	12.72	9.80	10.15	9.68	10.66	10.92	10.50	9.65	9.58
40	10.17	10.13	10.90	10.53	9.44	10.48	10.95	10.58	10.26	12.80	9.36	9.86	8.91	9.56	9.59	9.47	9.43	9.38
50	10.13	9.55	10.60	9.65	9.06	9.77	10.72	9.82	10.40	11.95	8.88	9.24	8.84	8.96	9.29	9.19	9.33	9.13
60	9.45	8.99	10.09	9.21	8.80	9.67	10.06	8.92	10.03	11.52	8.84	8.77	8.77	9.08	9.04	9.01	9.24	
70	9.22	8.84	9.49	8.77	8.58	9.09	9.38	8.70	9.59	10.65	8.82	8.69	8.72	8.85	8.88	8.82	9.11	
80	9.07	8.62	9.08	8.59	8.38	8.85	8.77	8.56	8.98	9.91	8.81		8.58					
90	8.63	8.38	8.70	8.25	8.17	8.74	8.33	8.46	8.77	9.30	8.72		8.52					
100	8.25	8.22	8.13	8.06	8.00	8.51	8.20	8.26	8.66	8.91	8.59		8.44					
110	8.04	8.08	7.81	7.91	7.81	8.25	8.13	8.12	8.40	8.92	8.41							
120	7.92	8.04	7.99	7.84	7.76	7.97	7.94	7.99	8.27	8.32	8.34							
130	7.91	8.00	8.05	7.69	7.66	7.91	7.83	7.85	8.17	8.20	8.27							
140	7.89	7.97	7.92	7.57	7.52	7.74	7.72	7.73	7.97	8.09								
150	7.77	7.95	7.71	7.51	7.46	7.72	7.69	7.62	7.87	8.05								
160	7.75	7.70	7.51	7.39	7.46	7.67	7.56	7.53	7.69	8.06								
170	7.75	7.55	7.39	7.27	7.34	7.57	7.44	7.44	7.52	7.87								
180	7.75	7.45	7.18	7.17	7.28	7.46	7.38	7.34	7.32	7.78								
190	7.60	7.40	7.13	7.03	7.10	7.39	7.28	7.24	7.17	7.64								
200	7.45	7.29	7.03	6.98	7.02	7.28	7.07	7.17	7.10	7.51								
220	7.28	7.14	6.88	6.91	6.85	7.03	6.99	6.91	6.94	7.30								
240	7.19	6.98	6.67	6.76	6.63	6.76	6.82	6.68	6.86	7.08								
260	7.07	6.80	6.35	6.55	6.34	6.55	6.48	6.38	6.69	6.69								
280	6.91	6.71	6.21	6.40	6.30	6.61	6.32	6.14	6.30	6.64								
300	6.79	6.50	6.13	6.26	6.15	6.52	6.19	6.15	6.28	6.45								
320	6.70	6.36	5.96	6.16	6.00	6.32	6.01	6.04	6.19	6.18								
340	6.62	6.28	5.84	6.04	5.89	5.96	6.12	5.88	6.13	6.02								
360	6.56	6.27	5.75	5.86	5.76	5.91	5.83	5.77	5.97	5.83								
380	6.43	6.17	5.77	5.75	5.75	5.76	5.71	5.61	5.89	5.68								
400	6.31	5.98	5.47	5.59	5.60	5.66	5.43	5.33	5.58	5.59								
420	6.24	5.93	5.23	5.43	5.51	5.48	5.38	5.36	5.58	5.65								
440	6.19	5.81	5.16	5.29	5.36	5.41	5.30	5.27	5.47	5.55								
460	6.12	5.74	5.04	5.19	5.28	5.36	5.21	5.19	5.44	5.45								

	Station																	
	N25	N27	N29	N31	N33	N35	N36	N53	N55	N57	N59	N61	N63	N64	N65	N67	N69	N71
depth(m)																		
5	10.47	11.06	11.11	10.95	10.53	11.95	12.22	10.01	11.33	12.02	11.69	12.12	11.88	11.45	11.15	11.18	11.86	12.20
10	10.45	11.05	11.01	10.88	10.46	11.95	12.21	9.96	11.16	11.94	11.66	12.12	11.74	11.43	11.15	11.17	11.86	12.21
20	10.09	11.02	10.96	10.55	9.92	11.81	12.19	9.91	10.37	11.65	11.39	11.75	11.74	11.43	11.13	11.13	11.82	12.21
30	9.39	11.00	10.94	10.43	9.89	11.67	12.13	9.94	10.22	11.39	11.26	11.58	11.73	10.68	11.00	11.00	11.22	11.34
40		10.97	10.93	10.19	9.80	11.41	12.04	9.91	10.23	11.33	11.22	11.18	11.40	10.34	10.63	10.91	10.46	10.45
50		11.06	10.58	9.92	9.76	10.34	11.93	9.81	10.07	10.49	10.98	10.65	10.23	9.93	10.07	10.70	10.20	10.26
60		10.83	9.67	9.77	9.74	9.76	10.76	9.67	10.12	9.70	10.27	9.55	9.71	9.56	9.56	9.87	10.18	9.54
70		10.25	9.54	9.36	9.70	9.37	9.78	9.78	9.88	9.69	9.94	9.40	9.24	9.36	9.13	9.70	10.11	9.21
80		10.06	9.56	9.30	9.36	9.26	9.57	9.40	9.73	9.39	9.33	8.99	9.08	8.97	8.99	9.17	10.00	8.94
90		9.90	9.42	9.09	9.03	9.17	9.20	9.37	9.49	9.08	9.23	8.83	9.01	8.83	8.87	9.16	9.78	9.01
100		9.68	9.18	9.02	8.90	9.23	9.46	9.29	9.38	9.03	9.31	8.72	8.90	8.71	8.65	8.88	9.42	8.86
110		9.39	8.90	8.99	8.92	9.02	9.38	9.28	9.21	8.97	9.10	8.78	8.81	8.57	8.54	8.67	9.09	8.66
120		9.31	8.76	8.87	8.91	8.85	9.22	9.09	9.02	8.90	8.96	8.80	8.64	8.43	8.42	8.70	8.67	8.22
130		9.24	8.58	8.83	8.83	8.69	8.93	8.94	8.93	8.68	8.88	8.71	8.57	8.33	8.34	8.69	8.50	8.10
140		9.02	8.59	8.74	8.76	8.62	8.87	8.77	8.90	8.42	8.72	8.53	8.45	8.13	8.25	8.78	8.28	8.10
150		8.99	8.46	8.68	8.75	8.59	8.78	8.65	8.65	8.48	8.60	8.40	8.30	7.99	8.10	8.71	8.09	8.42
160		8.86	8.43	8.57	8.68	8.57	8.72	8.61	8.54	8.47	8.39	8.21	8.15	7.81	8.01	8.57	8.01	8.56
170		8.72	8.42	8.46	8.52	8.47	8.63	8.40	8.50	8.23	8.30	8.11	8.01	7.73	7.86	8.37	8.04	8.46
180		8.64	8.33	8.35	8.28	8.30	8.63	8.20	8.28	8.04	8.11	8.02	7.83	7.70	7.72	8.39	8.18	8.38
190		8.54	8.33	8.25	8.27	8.23	8.56	8.11	8.23	7.88	7.91	7.97	7.66	7.73	7.72	8.22	8.16	8.27
200		8.32	8.18	8.19	8.23	8.25	8.52	7.99	8.06	7.75	7.90	7.85	7.49	7.44	7.65	8.10	8.10	8.16
220		8.09	8.02	7.94	8.17	8.11	8.38	7.96	8.00	7.39	7.63	7.69	7.27	7.27	7.48	8.13	7.94	7.84
240		7.80	7.84	7.79	7.78	7.99	8.23	7.73	7.56	7.23	7.58	7.45	7.03	7.10	7.52	8.09	7.73	7.58
260		7.69	7.66	7.76	7.57	7.87	8.14	7.54	7.04	7.02	7.34	7.10	6.74	7.02	7.51	8.02	7.20	7.35
280		7.63	7.51	7.66	7.26	7.55	7.93	7.43	6.85	6.92	7.20	6.95	6.59	6.94	7.14	7.47	7.00	6.93
300		7.50	7.35	7.34	7.21	7.48	7.64	7.36	6.67	6.79	6.88	6.82	6.50	6.75	6.84	7.22	6.81	6.83
320		7.39	7.20	7.13	7.17	7.27	7.64	7.02	6.52	6.70	6.66	6.55	6.21	6.64	6.56	7.03	6.65	6.65
340		7.26	7.00	7.02	7.06	7.08	7.27	6.66	6.43	6.69	6.55	6.28	6.12	6.55	6.38	6.89	6.57	6.53
360		6.97	6.79	6.89	6.99	6.93	7.21	6.56	6.28	6.49	6.43	6.27	5.93	6.19	6.16	6.61	6.34	6.46
380		6.68	6.60	6.64	6.92	6.75	7.09	6.43	6.35	6.14	6.28	6.06	5.88	6.19	6.25	6.53	6.26	6.28
400		6.28	6.46	6.53	6.70	6.59	6.77	6.49	6.19	5.91	6.15	5.86	5.85	5.99	5.89	6.37	6.06	5.91
420		6.08	6.43	6.38	6.48	6.44	6.57	6.48	6.06	5.91	5.97	5.81	5.79	5.96	5.84	6.19	5.93	5.77
440		5.92	6.27	6.34	6.32	6.35	6.37	6.33	6.00	5.61	5.81	5.81	5.61	5.69	5.60	6.15	5.81	5.71
460		5.80	6.15	6.21	6.19	6.09	6.16	6.12	5.91	5.66	5.69	5.73	5.46	5.51	5.56	6.10	5.49	5.59

SQ87 Leg II

XBT Temperature (°C)

Station

depth (m)	N73	N74	N76	N77	N79	N81	N83	N85	N86	N87	N88	N89	N90	N92	N93	N94	N95	N96
5	11.18	11.92	12.04	12.13	12.07	12.22	12.13	12.23	12.36	12.17	12.09	12.43	12.10	11.53	12.60	12.21	12.15	11.91
10	11.17	11.91	12.03	12.10	12.07	12.23	12.05	12.23	12.36	12.16	12.06	12.42	12.10	11.50	12.59	12.20	12.16	11.92
20	11.15	11.90	12.00	12.11	12.02	12.20	11.04	12.23	12.35	12.16	12.07	12.42	12.05	11.07	12.60	12.20	12.12	11.96
30	11.08	11.88	11.99	12.03	11.88	11.02	10.35	12.23	11.82	11.96	12.03	11.30	10.79	11.01	12.59	12.20	12.11	11.53
40	10.42	11.19	11.91	11.58	11.55	10.97	9.66	9.83	11.44	11.84	11.95	10.74	9.94	10.90	12.59	12.17	12.11	11.57
50	9.65	10.26	11.59	11.16	11.61	10.40	9.50	9.64	11.09	10.79	10.43	10.02	9.32	10.81	12.57	12.07	11.65	11.43
60	9.21	9.77	11.26	11.00	10.87	9.48	9.81	9.17	9.96	9.99	9.87	9.18	9.35	10.71	11.96	11.97	11.35	11.33
70	9.03	9.50	11.01	10.46	10.49	9.38	9.56	9.03	9.09	9.95	9.42	9.21	8.95	10.33	10.92	11.15	11.36	11.42
80	9.20	9.23	10.55	10.89	9.51	9.33	9.36	8.97	8.84	9.23	9.18	9.16	8.74	9.46	9.76	10.21	11.35	11.73
90	9.19	9.06	10.40	10.62	10.09	9.26	9.43	8.77	8.86	8.96	8.92	8.72	8.66	9.61	9.89	9.40	10.99	11.04
100	9.11	9.04	10.07	10.36	9.85	9.11	9.17	8.66	8.71	8.82	8.77	8.47	8.73	9.86	9.70	9.47	10.64	10.32
110	9.05	8.82	9.79	10.16	9.72	9.00	9.01	8.58	8.66	8.67	8.64	8.27	8.98	9.52	9.48	9.21	10.00	9.97
120	8.98	8.61	9.65	10.00	9.60	9.24	8.88	8.43	8.46	8.59	8.50	8.79	8.88	9.05	9.28	9.21	9.75	9.41
130	8.89	8.49	9.55	9.75	9.48	9.19	8.62	8.30	8.21	8.50	8.43	8.67	8.73	8.85	9.01	9.40	9.51	9.46
140	8.79	9.02	9.34	9.59	9.34	8.98	8.44	8.18	8.07	8.36	8.27	8.47	8.64	8.67	8.78	8.86	9.00	9.39
150	8.73	9.10	9.14	9.47	9.17	8.85	8.35	8.09	7.97	8.21	8.14	8.41	8.57	8.48	8.65	8.85	8.67	8.89
160	8.61	8.83	8.95	9.35	8.95	8.72	8.20	7.91	7.89	8.13	7.96	8.39	8.45	8.32	8.50	8.74	8.56	8.65
170	8.56	8.62	8.77	9.28	8.75	8.24	8.05	7.86	7.74	8.11	7.85	8.31	8.31	8.20	8.55	8.41	8.41	8.55
180	8.46	8.63	8.19	9.09	8.59	8.11	7.98	7.69	7.67	8.13	7.73	8.24	8.15	8.17	8.40	8.60	8.28	8.46
190	8.38	8.44	8.12	8.93	8.46	7.99	7.90	7.56	7.55	7.83	7.69	8.02	8.29	8.07	8.32	8.45	8.23	8.30
200	8.34	8.45	8.05	8.73	7.91	7.95	7.78	7.35	7.40	7.70	7.62	7.90	7.84	7.93	8.18	8.33	8.06	8.09
220	7.97	8.06	7.69	8.51	7.76	7.75	7.48	7.18	7.19	7.47	7.49	7.78	7.98	7.54	7.82	7.99	7.75	8.35
240	7.71	7.76	7.48	8.13	7.65	7.48	7.37	7.03	6.97	7.17	7.22	7.63	7.53	7.59	7.52	7.61	7.56	7.86
260	7.40	7.37	7.18	7.54	7.51	7.37	7.13	6.62	6.81	6.93	7.16	7.18	7.22	7.50	7.50	7.62	7.35	7.66
280	7.31	7.28	7.13	7.43	7.36	7.13	7.16	6.47	6.78	6.88	6.93	7.12	6.99	7.25	7.13	7.37	7.17	7.41
300	7.20	6.91	6.90	7.18	7.15	7.20	6.96	6.32	6.51	6.65	6.65	6.68	6.91	6.78	7.07	7.12	6.89	7.06
320	6.55	6.85	6.92	6.94	7.15	7.10	6.79	6.18	6.30	6.48	6.49	6.54	6.75	6.60	6.88	6.87	6.64	6.88
340	6.39	6.38	6.81	6.78	6.92	7.06	6.71	5.97	6.18	6.35	6.25	6.38	6.51	6.41	6.75	6.61	6.57	6.73
360	6.36	6.38	6.70	6.66	6.59	6.94	6.53	5.84	6.06	6.21	6.16	6.43	6.28	6.12	6.61	6.36	6.48	6.51
380	6.32	6.37	6.51	6.37	6.54	6.80	6.33	5.75	5.89	6.09	5.90	6.30	6.14	5.98	6.35	6.18	6.18	6.45
400	6.03	6.18	6.38	6.31	6.32	6.52	6 19	5.71	5.78	5.93	5.88	6.10	6.01	5.82	6.26	6.01	5.77	5.94
420	5.83	6.05	6.20	6.23	6.20	6.38	6.15	5.71	5.60	5.78	5.72	6.00	5.82	5.98	6.07	5.90	5.57	5.76
440	5.71	5.85	6.08	6.02	5.95	6.31	6.03	5.58	5.43	5.64	5.61	5.81	5.77	5.89	5.88	5.83	5.50	5.76
460	5.74	5.68	5.77	5.89	5.83	5.94	5.85	5.53	5.30	5.53	5.50	5.57	5.75	5.70	5.76	5.68	5.52	5.82

Station

depth (m)	N97	N98
5	12.26	12.28
10	12.13	11.71
20	12.08	11.40
30	11.97	11.18
40	12.22	11.15
50	12.03	11.17
60	11.85	10.90
70	10.86	10.82
80	10.72	10.31
90	10.54	9.94
100	10.31	9.21
110	9.89	9.21
120	10.26	9.15
130	9.73	8.70
140	9.48	8.55
150	9.32	8.51
160	9.19	8.28
170	9.08	8.34
180	8.89	8.18
190	8.74	8.09
200	8.62	7.89
220	8.40	7.56
240	8.06	7.31
260	7.84	7.09
280	7.76	7.02
300	7.56	6.76
320	7.29	6.53
340	7.14	6.38
360	7.04	6.39
380	6.86	6.17
400	6.45	6.02
420	6.38	5.95
440	6.41	5.84
460	6.30	5.30

Cruise SQ87

SURFACE NUTRIENTS AT XBT STATIONS

STATION	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	STATION	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L
G 2	3.0	0.34	0.2	0.02	G 135	2.6	0.44	0.0	0.00
G 4	16.5	1.18	11.3	0.18	G 137	2.4	0.44	0.0	0.00
G 6	22.7	1.49	16.5	0.11	G 139	2.0	0.44	0.0	0.00
G 8	17.8	1.10	11.7	0.15	G 141	1.1	0.43	0.0	0.01
G 12	2.9	0.47	0.5	0.02	G 143	1.1	0.41	0.0	0.00
G 14	2.5	0.41	0.2	0.00	G 145	2.2	0.44	0.0	0.00
G 20	9.7	0.82	5.2	0.11	G 151	2.3	0.45	0.0	0.00
G 22	14.6	0.90	8.5	0.13	G 153	2.3	0.43	0.0	0.00
G 26	13.6	0.89	8.1	0.13	G 155	2.5	0.44	0.0	0.01
G 31	16.7	1.05	10.7	0.14	G 157	2.5	0.44	0.0	0.01
G 33	20.8	1.19	13.2	0.19	G 159	2.4	0.44	0.0	0.00
G 35	12.0	0.88	6.7	0.10	G 161	2.1	0.45	0.0	0.01
G 37	6.6	0.60	2.4	0.04	G 165	1.7	0.45	0.0	0.00
G 39	2.7	0.47	0.2	0.00	G 167	2.0	0.44	0.0	0.01
G 41	12.2	0.83	7.5	0.12	G 169	2.1	0.44	0.0	0.01
G 43	14.9	0.80	7.7	0.15	G 172	2.0	0.44	0.1	0.00
G 45	19.5	1.15	12.4	0.17	G 174	2.2	0.43	0.1	0.00
G 47	10.3	0.74	5.7	0.11	G 176	2.6	0.42	0.0	0.00
G 49	2.5	0.46	0.1	0.00	G 178	2.5	0.45	0.0	0.00
G 51	2.8	0.49	0.0	0.02	G 180	3.0	0.46	0.0	0.00
G 53	2.6	0.47	0.0	0.01	G 182	3.3	0.46	0.0	0.00
G 55	2.8	0.46	0.0	0.00	G 184	3.0	0.46	0.0	0.00
G 59	11.7	0.91	6.6	0.13	G 186	3.0	0.46	0.0	0.00
G 61	16.8	1.11	11.2	0.16	G 188	3.0	0.47	0.0	0.00
G 63	7.0	0.70	2.5	0.12	G 190	2.5	0.46	0.0	0.00
G 65	4.1	0.53	0.4	0.11	G 192	2.3	0.46	0.0	0.00
G 68	2.3	0.48	0.0	0.05	G 196	1.6	0.43	0.0	0.00
G 70	3.3	0.42	0.1	0.00	G 198	3.0	0.47	0.1	0.00
G 72	9.9	0.64	2.8	0.09	G 200	2.7	0.44	0.0	0.00
G 74	15.9	0.95	8.0	0.14	G 202	2.4	0.42	0.0	0.00
G 76	15.8	1.04	10.0	0.16	G 204	2.1	0.44	0.0	0.00
G 82	2.3	0.45	0.1	0.00	G 206	3.6	0.43	0.0	0.01
G 84	5.6	0.64	1.1	0.16	G 208	4.1	0.42	0.0	0.00
G 86	13.7	0.84	8.2	0.14	G 210	3.8	0.43	0.0	0.00
G 88	17.0	0.99	9.4	0.14	G 212	3.3	0.46	0.0	0.00
G 90	15.5	0.91	9.1	0.14	G 216	2.6	0.42	0.0	0.00
G 92	5.2	0.41	1.6	0.07	G 218	2.7	0.43	0.1	0.01
G 94	12.9	0.73	6.2	0.12	G 222	2.7	0.43	0.1	0.00
G 96	15.6	0.91	8.6	0.14	G 225	2.8	0.43	0.1	0.00
G 98	9.2	0.78	5.1	0.11	G 227	2.7	0.43	0.1	0.00
G 102	2.2	0.44	0.1	0.00	G 229	2.6	0.44	0.1	0.00
G 104	2.3	0.44	0.0	0.00	G 231	3.0	0.43	0.1	0.00
G 106	2.5	0.46	0.0	0.00	G 233	2.5	0.44	0.0	0.00
G 108	2.9	0.44	0.1	0.03	G 235	2.8	0.44	0.0	0.00
G 110	12.8	0.92	8.2	0.13	G 241	3.2	0.39	0.0	0.00
G 112	18.4	1.18	12.9	0.14	G 245	2.2	0.40	0.0	0.00
G 114	3.2	0.57	1.0	0.13	G 247	2.6	0.41	0.0	0.00
G 116	2.2	0.47	0.1	0.00	G 249	2.7	0.41	0.0	0.00
G 118	2.6	0.47	0.1	0.00	G 251	2.9	0.41	0.0	0.00
G 119	2.1	0.47	0.1	0.00					
G 121	2.2	0.44	0.1	0.00	N 1	1.1	0.24	0.0	0.00
G 123	2.2	0.45	0.1	0.00	N 2	12.5	0.94	8.8	0.13
G 125	2.1	0.45	0.1	0.00	N 3	8.0	0.72	4.3	0.12
G 127	2.4	0.46	0.1	0.02	N 4	7.0	0.71	4.2	0.11
G 129	2.4	0.45	0.1	0.00	N 5	3.2	0.41	0.1	0.03
G 131	2.0	0.42	0.1	0.00	N 6	2.7	0.37	0.1	
G 133	2.7	0.44	0.0	0.00	N 7	1.7	0.36	0.0	0.00

PRIMARY PRODUCTIVITY CASTS

RV NEW HORIZON — CRUISE SQ87 LEG I — STATION G 3

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
38 32.0 N	123 23.3 W	30/ 4/87	1818 GMT	5 M	1311 - 2034 PST	1311 PST	2033 PST	1381.4 MG C/M2

DEPTH M	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL UG/L	PHAEO UG/L	LIGHT PCT	UPTAKE (MG C/M3) 1	2	MEAN	DARK
1	11.20	33.002	25.185	7.86	126.1	2.5	0.39	0.1	0.03	15.33	0.93	98.	110.0	73.8	91.9	0.99
4	11.14	33.014	25.205	7.79	124.8	3.4	0.35	0.2	0.04	15.52	1.43	37.	295.9	151.0	223.4	1.1
7	10.67	33.064	25.327	6.63	105.2	10.7	0.86	6.4	0.15	8.34	1.08	17.	91.6	103.1	97.3	0.68
11	10.16	33.131	25.466	5.76	90.4	16.3	1.18	11.9	0.19	2.60	0.54	4.3	17.9	18.3	18.1	0.26
18	10.05	33.166	25.512	5.64	88.3	17.8	1.23	13.1	0.21	2.07	0.54	0.83	6.5	6.4	6.4	0.14
23	9.78	33.227	25.605	5.35	83.3	20.3	1.36	15.3	0.27	0.60	0.34	0.16	2.1	0.26	1.2	0.73

RV NEW HORIZON — CRUISE SQ87 LEG I — STATION G 30

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
40 19.2 N	124 40.8 W	1/ 5/87	1851 GMT	10 M	1318 - 2044 PST	1316 PST	2042 PST	1136.6 MG C/M2

DEPTH M	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL UG/L	PHAEO UG/L	LIGHT PCT	UPTAKE (MG C/M3) 1	2	MEAN	DARK
1	10.79	33.237	25.440	6.31	100.4	17.8	1.11	12.0	0.14	3.08	0.72	98.	61.6	67.3	64.4	0.35
8	10.0[illegible]	33.304	25.625	5.81	91.0	21.3	1.31	14.9	0.15	1.98	0.88	37.	37.8	42.8	40.3	0.37
13	9.94	33.309	25.642	5.73	89.6	21.6	1.34	15.0	0.16	1.79	0.72	17.	38.4	31.9	35.2	0.24
22	9.94	33.308	25.642	5.70	89.1	21.8	1.34	15.2	0.16	1.87	0.70	4.3	29.4	22.7	26.1	0.26
33	9.77	33.345	25.699	5.41	84.2	24.5	1.43	16.2	0.18	1.44	0.59	0.83	8.4	8.5	8.4	0.20
44	9.11	33.520	25.943	4.59	70.5	27.5	1.69	20.7	0.18	0.59	0.41	0.16	1.2	0.68	0.95	0.10

RV NEW HORIZON — CRUISE SQ87 LEG I — STATION G 46

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
39 46.0 N	124 29.6 W	2/ 5/87	1917 GMT	12 M	1313 - 2045 PST	1315 PST	2040 PST	1167.8 MG C/M2

DEPTH M	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL UG/L	PHAEO UG/L	LIGHT PCT	UPTAKE (MG C/M3) 1	2	MEAN	DARK
1	11.26	33.127	25.271	6.20	99.6	16.1	1.04	9.3	0.13	1.45	0.37	98.	51.9	55.3	53.6	0.42
9	10.55	33.213	25.464	5.90	93.4	18.6	1.17	11.7	0.15	1.85	0.42	37.	41.3	51.2	46.3	0.49
15	9.96	33.329	25.655	5.43	84.9	21.9	1.35	14.8	0.17	1.59	0.49	17.	37.5	36.4	37.0	0.38
27	9.46	33.528	25.893	4.93	76.3	27.2	1.58	19.5	0.19	1.04	0.57	4.3	16.4	16.1	16.3	0.36
39	8.88	33.689	26.111	4.21	64.4	31.8	1.84	23.2	0.19	0.49	0.36	0.83	3.5	3.7	3.6	0.19
53	8.44	33.722	26.205	3.59	54.4	34.2	1.94	25.6	0.19	0.15	0.21	0.16	0.38	0.42	0.40	0.10

RV NEW HORIZON — CRUISE SQ87 LEG I — STATION G 67

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
38 5.7 N	123 30.0 W	3/ 5/87	1922 GMT	10 M	1304 - 2041 PST	1311 PST	2039 PST	2059.4 MG C/M2

DEPTH M	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL UG/L	PHAEO UG/L	LIGHT PCT	UPTAKE (MG C/M3) 1	2	MEAN	DARK
1	11.51	32.707	24.899	6.74	108.6	4.0	0.54	0.7	0.08	11.80 A	1.94 A	98.	52.8	46.0	49.4	0.50
8	11.50	32.707	24.901	6.72	108.3	3.9	0.57	0.5	0.08	11.54	2.16	37.	72.1	65.0	68.5	0.57
13	11.45	32.720	24.921	6.73	108.3	4.0	0.54	0.6	0.08	5.09	0.85	17.	58.8	65.9	62.4	0.44
21	11.30	32.787	25.000	6.75	108.4	4.3	0.55	1.0	0.08	3.51	0.84	4.3	44.2	48.6	46.4	0.46
33	11.07	33.023	25.225	6.87	109.9	4.3	0.56	2.1	0.09	3.12	0.68	0.83	39.8	52.3	46.0	0.64
44	11.01	33.062	25.266	6.87	109.8	4.7	0.56	2.6	0.10	3.25	0.71	0.16	4.7	5.3	5.0	0.52

A) THE CHLOROPHYLL SAMPLES FOR THIS STATION APPEAR TO HAVE BEEN DRAWN AND ANALYSED IN REVERSE ORDER. THEY ARE ASSUMED TO NOW BE IN THE CORRECT ORDER.

RV NEW HORIZON — CRUISE SQ87 LEG I — STATION G 87

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
39 37.5 N	124 39.7 W	4/ 5/87	1937 GMT	8 M	1315 - 2049 PST	1315 PST	2048 PST	1473.6 MG C/M2

DEPTH M	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL UG/L	PHAEO UG/L	LIGHT PCT	UPTAKE (MG C/M3) 1	2	MEAN	DARK
1	10.95	33.208	25.389	6.65	106.2	13.7	0.82	7.8	0.14	4.15	1.12	98.	73.2	58.5	65.9	0.62
6	10.94	33.211	25.394	6.65	106.2	13.8	0.88	7.6	0.14	4.08	1.10	37.	87.3	86.4	86.8	0.59
10	10.92	33.215	25.400	6.66	106.3	14.3	0.87	7.8	0.14	4.02	1.04	17.	81.7	82.2	82.0	0.49
17	10.90	33.223	25.410	6.52	104.0	15.3	0.91	8.4	0.14	3.74	1.07	4.3	31.4	35.2	33.3	0.44
26	10.85	33.233	25.427	6.47	103.1	17.0	1.00	9.7	0.15	3.25	1.24	0.83	13.2	14.4	13.8	0.42
35	10.70	33.280	25.490	6.40	101.7	18.6	1.08	10.9	0.16	3.21	1.25	0.16	2.5	2.2	2.4	0.33

PRIMARY PRODUCTIVITY CASTS

RV NEW HORIZON — CRUISE SQ87 LEG 1 — STATION G 107

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
38 52.9 N	124 24.2 W	5/ 5/87	1918 GMT	19 M	1311 - 2045 PST	1314 PST	2040 PST	277.8 MG C/M2

DEPTH M	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL UG/L	PHAEO UG/L	LIGHT PCT	UPTAKE (MG C/M3) 1	2	MEAN	DARK
1	12.54	32.594	24.619	6.37	104.9	2.7	0.42	0.1	0.00	0.26	0.07	98.	4.4	4.1	4.2	0.16
13	12.48	32.591	24.629	6.36	104.6	2.7	0.42	0.1	0.00	0.28	0.07	37.	5.8	5.6	5.7	0.19
24	12.45	32.590	24.634	6.38	104.8	2.7	0.43	0.1	0.00	0.26	0.06	17.	4.2	5.1	4.7	0.21
41	12.42	32.590	24.640	6.38	104.8	2.6	0.42	0.1	0.00	0.29	0.08	4.3	3.1	3.1	3.1	0.18
62	11.20	32.678	24.934	6.22	99.6	5.7	0.65	3.0	0.41	0.54	0.23	0.83	2.7	2.7	2.7	0.10
83	10.35	32.871	25.233	5.52	86.8	10.6	1.00	9.5	0.04	0.13	0.08	0.16	0.13	0.15	0.14	0.02

RV NEW HORIZON — CRUISE SQ87 LEG 1 — STATION G 130

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
38 42.8 N	124 31.1 W	6/ 5/87	1949 GMT	21 M	1318 - 2047 PST	1315 PST	2046 PST	263.0 MG C/M2

DEPTH M	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL UG/L	PHAEO UG/L	LIGHT PCT	UPTAKE (MG C/M3) 1	2	MEAN	DARK
1	12.94	32.603	24.549	6.33	105.1	2.4	0.41	0.1	0.00	0.20	0.05	98.	4.0	3.2	3.6	0.16
16	12.64	32.604	24.608	6.33	104.5	2.4	0.41	0.0	0.00	0.23	0.06	37.	4.8	4.8	4.8	0.26
26	12.61	32.607	24.616	6.34	104.6	2.5	0.42	0.0	0.00	0.23	0.07	17.	4.6	4.5	4.5	0.21
44	12.56	32.599	24.620	6.31	103.9	2.5	0.42	0.0	0.00	0.26	0.08	4.3	2.3	2.4	2.4	0.20
69	11.06	32.639	24.929	6.22	99.2	5.9	0.63	2.8	0.25	0.45	0.20	0.83	2.2	2.5	2.3	0.10
92	10.37	32.964	25.302	5.34	84.1	11.7	1.06	10.1	0.03	0.10	0.08	0.16	0.11	0.36	0.23	0.08

RV NEW HORIZON — CRUISE SQ87 LEG 1 — STATION G 152

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
39 9.3 N	125 4.1 W	7/ 5/87	1931 GMT	26 M	1318 - 2048 PST	1317 PST	2044 PST	308.5 MG C/M2

DEPTH M	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL UG/L	PHAEO UG/L	LIGHT PCT	UPTAKE (MG C/M3) 1	2	MEAN	DARK
1	13.81	32.721	24.466	6.22	105.3	2.3	0.46	0.0	0.00	0.13	0.02	98.	2.8	2.5	2.7	0.15
18	13.25	32.720	24.579	6.24	104.4	2.3	0.42	0.0	0.00	0.17	0.02	37.	4.9	4.8	4.8	0.25
32	13.10	32.717	24.606	6.25	104.2	2.3	0.42	0.0	0.00	0.17	0.03	17.	3.2	3.5	3.4	0.23
56	12.81	32.709	24.658	6.30	104.4	2.3	0.44	0.0	0.00	0.39	0.09	4.3	4.2	4.2	4.2	0.19
84	11.27	32.831	25.041	5.94	95.3	6.4	0.72	4.4	0.06	0.28	0.17	0.83	1.2	1.2	1.2	0.09
113	9.73	33.226	25.614	4.78	74.3	19.1	1.39	16.4	0.02	0.05	0.04	0.16	0.03	0.03	0.03	0.10

RV NEW HORIZON — CRUISE SQ87 LEG 1 — STATION G 173

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
37 45.9 N	124 20.1 W	8/ 5/87	1946 GMT	27 M	1319 - 2046 PST	1314 PST	2047 PST	350.2 MG C/M2

DEPTH M	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL UG/L	PHAEO UG/L	LIGHT PCT	UPTAKE (MG C/M3) 1	2	MEAN	DARK
0	13.69	32.602	24.398	6.25	105.4	1.9	0.43	0.1	0.00	0.15	0.02	98.	6.5	6.8	6.7	0.20
19	12.68	32.554	24.562	6.35	104.8	2.0	0.46	0.1	0.00	0.16	0.05	37.	5.0	5.1	5.0	0.27
31	12.73	32.590	24.580	6.34	104.8	2.0	0.44	0.1	0.00	0.21	0.05	17.	3.7	3.3	3.4	0.19
57	12.73	32.868	24.796	6.25	103.5	3.3	0.44	0.0	0.00	0.62	0.21	4.3	4.7	4.5	4.6	0.13
86	11.56	33.097	25.195	5.61	90.7	7.3	0.84	6.3	0.02	0.21	0.17	0.83	0.62	0.60	0.61	0.10
115	9.80	33.439	25.769	4.14	64.5	18.8	1.53	18.5	0.01	0.02	0.10	0.16	0.01	0.02	0.02	0.08

RV NEW HORIZON — CRUISE SQ87 LEG 1 — STATION G 195

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
39 27.0 N	125 32.1 W	9/ 5/87	1943 GMT	21 M	1315 - 2052 PST	1318 PST	2051 PST	289.7 MG C/M2

DEPTH M	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL UG/L	PHAEO UG/L	LIGHT PCT	UPTAKE (MG C/M3) 1	2	MEAN	DARK
1	14.08	32.635	24.344	6.14	104.4	1.5	0.43	0.0	0.00	0.12	0.02	98.	5.5	5.9	5.7	0.22
15	13.41	32.660	24.50[illegible]	6.21	104.2	1.6	0.45	0.0	0.00	0.14	0.02	37.	4.4	4.4	4.4	0.23
26	13.41	32.703	24.5[illegible]	6.22	104.4	1.8	0.43	0.0	0.00	0.18	0.03	17.	4.4	3.4	3.9	0.17
45	12.66	32.725	24.699	6.34	104.7	2.0	0.44	0.0	0.00	0.29	0.08	4.3	2.5	2.6	2.5	0.16
69	11.77	32.834	24.952	6.16	99.9	3.9	0.58	1.2	0.20	0.79	0.35	0.83	3.2	3.4	3.3	0.15
91	11.05	33.012	25.221	5.48	87.6	8.3	0.91	7.9	0.02	0.19	0.17	0.16	0.09	0.09	0.09	0.10

PRIMARY PRODUCTIVITY CASTS

RV NEW HORIZON — CRUISE SQ87 LEG I — STATION G 215

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
38 4.4 N	124 53.5 W	10/ 5/87	1931 GMT	18 M	1313 - 2046 PST	1315 PST	2045 PST	257.6 MG C/M2

DEPTH M	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL UG/L	PHAEO UG/L	LIGHT PCT	UPTAKE (MG C/M3) 1	2	MEAN	DARK
0	13.52	32.722	24.526	6.23	104.8	2.9	0.43	0.1	0.00	0.19	0.02	98.	4.9	4.7	4.8	0.17
12	13.51	32.717	24.524	6.24	104.9	2.9	0.42	0.1	0.00	0.19	0.04	37.	4.3	4.0	4.2	0.20
21	13.29	32.720	24.571	6.27	105.0	3.1	0.43	0.0	0.00	0.21	0.04	17.	3.0	3.4	3.2	0.18
38	13.03	32.881	24.747	6.30	105.0	4.0	0.42	0.0	0.00	0.45	0.16	4.3	3.5	3.4	3.5	0.17
58	12.60	33.012	24.933	5.98	98.8	5.0	0.55	1.3	0.21	0.92	0.36	0.83	3.9	3.9	3.9	0.22
78	11.29	33.402	25.481	4.67	75.2	13.8	1.29	13.9	0.02	0.10	0.11	0.16	0.02	0.07	0.04	0.11

RV NEW HORIZON — CRUISE SQ87 LEG I — STATION G 234

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
38 0.7 N	125 12.6 W	11/ 5/87	1914 GMT	23 M	1316 - 2053 PST	1317 PST	2053 PST	355.7 MG C/M2

DEPTH M	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL UG/L	PHAEO UG/L	LIGHT PCT	UPTAKE (MG C/M3) 1	2	MEAN	DARK
2	13.43	32.650	24.488	6.31	105.9	2.7	0.43	0.0	0.01	0.18	0.04	98.	3.9	3.6	3.8	0.16
17	13.42	32.650	24.490	6.31	105.9	2.7	0.43	0.0	0.00	0.18	0.04	37.	6.0	5.5	5.8	0.19
30	13.28	32.641	24.512	6.31	105.6	2.7	0.45	0.0	0.00	0.21	0.05	17.	4.8	4.8	4.8	0.16
50	11.36	32.618	24.858	6.43	103.2	5.0	0.60	1.6	0.24	0.67	0.36	4.3	5.3	5.7	5.5	0.12
76	11.64	32.809	24.957	6.08	98.3	6.1	0.70	3.3	0.28	0.33	0.23	0.83	1.3	1.3	1.3	0.14
100	10.67	33.137	25.385	5.07	80.4	12.3	1.14	11.6	0.04	0.05	0.09	0.16	0.00	0.04	0.02	0.10

RV NEW HORIZON — CRUISE SQ87 LEG II — STATION N 39

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
38 9.8 N	123 16.4 W	18/ 5/87	1921 GMT	12 M	1311 - 2051 PST	1309 PST	2050 PST	1109.6 MG C/M2

DEPTH M	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL UG/L	PHAEO UG/L	LIGHT PCT	UPTAKE (MG C/M3) 1	2	MEAN	DARK
0	10.06	33.694	25.922	4.99	78.4	26.2	1.74	21.7	0.32	1.72	0.36	98.	62.0	64.7	63.3	0.38
9	9.86	33.694	25.956	4.91	76.8	26.3	1.81	21.7	0.32	1.59	0.56	37.	40.6	38.9	39.8	0.48
16	9.75	33.694	25.975	4.71	73.5	28.0	1.82	22.6	0.32	1.24	0.49	17.	30.9	30.9	30.9	0.32
27	9.72	33.697	25.982	4.65	72.5	28.6	1.86	22.8	0.32	1.19	0.51	4.3	12.9	13.6	13.3	0.25
39	9.68	33.699	25.990	4.57	71.2	29.7	1.86	23.2	0.31	1.03	0.50	0.83	5.7	5.8	5.7	0.22
52	9.62	33.703	26.004	4.49	69.8	29.7	1.88	23.6	0.30	0.93	0.40	0.16	0.61	0.66	0.63	0.18

RV NEW HORIZON — CRUISE SQ87 LEG II — STATION N 52

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
38 1.0 N	123 37.3 W	19/ 5/87	1930 GMT	16 M	1311 - 2055 PST	1311 PST	2053 PST	784.5 MG C/M2

DEPTH M	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL UG/L	PHAEO UG/L	LIGHT PCT	UPTAKE (MG C/M3) 1	2	MEAN	DARK
1	10.36	33.550	25.759	5.22	82.5	20.9	1.52	17.7	0.28	0.91	0.31	98.	26.5	23.0	24.8	0.32
11	9.93	33.554	25.835	4.96	77.6	23.8	1.65	19.7	0.23	0.71	0.60	37.	20.9	21.8	21.3	0.29
21	9.87	33.555	25.846	4.94	77.2	24.0	1.67	20.0	0.23	0.75	0.43	17.	23.4	23.1	23.2	0.26
35	9.86	33.618	25.897	4.49	70.2	24.3	1.72	20.9	0.27	0.54	0.35	4.3	7.7	8.2	8.0	0.24
53	9.87	33.758	26.005	3.32	51.9	25.5	1.83	23.4	0.14	0.19	0.34	0.83	0.92	0.85	0.89	0.26
71	9.70	33.841	26.099	2.92	45.5	28.5	1.94	25.2	0.04	0.11	0.17	0.16	0.03	0.03	0.03	0.22

RV NEW HORIZON — CRUISE SQ87 LEG II — STATION N 75

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
37 27.4 N	124 39.3 W	20/ 5/87	1923 GMT	11 M	1312 - 2054 PST	1315 PST	2055 PST	1138.2 MG C/M2

DEPTH M	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL UG/L	PHAEO UG/L	LIGHT PCT	UPTAKE (MG C/M3) 1	2	MEAN	DARK
1	11.88	32.833	24.929	6.30	102.4	3.2	0.64	1.4	0.07	3.22	0.20	98.	43.6	41.5	42.5	0.31
8	11.87	32.831	24.930	6.31	102.6	3.2	0.62	1.4	0.08	3.22	0.33	37.	47.8	46.5	47.2	0.36
14	11.87	32.831	24.930	6.31	102.6	3.1	0.62	1.4	0.08	2.97	0.28	17.	40.2	38.2	39.2	0.65
25	11.88	32.830	24.927	6.30	102.4	3.1	0.60	1.4	0.08	3.01	0.43	4.3	17.6	17.2	17.4	0.26
36	11.84	32.842	24.944	6.25	101.5	3.2	0.61	1.6	0.08	2.75	0.46	0.83	9.3	9.0	9.2	0.18
49	11.54	33.175	25.259	5.27	85.2	9.2	0.96	7.7	0.05	0.23	0.17	0.16	0.87	0.74	0.80	0.19

Secchi Disk Observations

Cruise SQ87

Sta.		Day	Mo.	Local Time (+8: PST)	Secchi Depth (m)	Weather	Clouds Type/Amt.	
G	1	30	4	0820	4	1	AS	4/8
G	3	30	4	1003	5	2	SC	8/8
G	7	30	4	1337	8	1	SC	5/8
G	30	1	5	1035	10	1	AC	5/8
G	46	2	5	1100	12	2	SC	8/8
G	67	3	5	1106	10	1	SC	5/8
G	69	3	5	1300	15	1	ST	7/8
G	87	4	5	1122	8	1	AS	2/8
G	107	5	5	1100	19	0	-	0
G	130	6	5	1135	21	-	-	-
G	152	7	5	1115	26	0	-	0
G	173	8	5	1130	27	4	ST	8/8
G	175	8	5	1300	24	4	-	-
G	195	9	5	1125	21	2	SC	8/8
G	197	9	5	1350	15	2	ST	8/8
G	215	10	5	1117	18	2	ST	8/8
G	234	11	5	1100	23	1	CC	5/8
G	236	11	5	1240	19	1	CS	2/8
N	39	18	5	1108	12	2	ST	8/8
N	52	19	5	1114	16	1	ST	7/8
N	75	20	5	1109	11	1	SC	7/8

Cruise SQ87

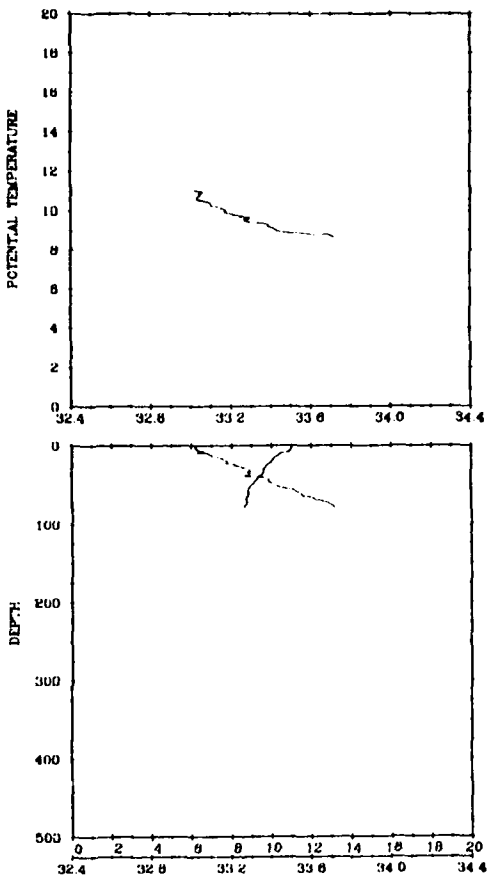
MACROZOOPLANKTON BIOMASS

Net Mesh Size: 0.505 mm

Station	Position		Date Mo/Day	Time (GMT) Start	Time (GMT) End	Water Volume Strained (m^3)	Meters of Wire out (m)	Volume per 1000 m^3 Strained Small (cm^3)	Volume per 1000 m^3 Strained Total (cm^3)
G 1	38 23.0N	123 15.4W	4/30	1620	1634	180	100	129	716
G 7	38 45.7N	123 41.5W	4/30	2205	2213	170	111	4	24
G 13	39 13.6N	123 53.0W	5/01	0324	0341	248	140	67	271
G 19	39 44.1N	123 58.4W	5/01	0836	0848	224	135	78	349
G 25	40 08.5N	124 20.8W	5/01	1346	1359	276	147	18	67
G 30	40 20.1N	124 41.0W	5/01	1956	2018	449	308		
G 34	40 00.4N	124 27.1W	5/02	0122	0144	444	310	60	135
G 40	39 33.8N	124 06.0W	5/02	0756	0817	431	392	86	201
G 44	39 55.3N	124 35.9W	5/02	1704	1725	523	300	58	111
G 50	39 30.5N	124 15.2W	5/03	0043	0106	382	300		
G 56	39 01.2N	124 04.4W	5/03	0721	0743	401	300	101	252
G 62	38 34.5N	123 39.1W	5/03	1336	1350	289	175	30	105
G 69	38 17.5N	123 40.5W	5/03	2202	2226	490	300	52	105
G 75	38 44.3N	124 03.7W	5/04	0523	0547	517	300	119	230
G 81	39 11.4N	124 20.7W	5/04	1225	1246	488	300	149	305
G 87	39 38.1N	124 39.8W	5/04	2038	2059	465	300	32	69
G 95	39 45.6N	125 01.5W	5/05	0622	0645	492	300	144	294
G 101	39 19.5N	124 40.7W	5/05	1212	1236	487	306	67	137
G 107	38 53.0N	124 24.4W	5/05	1928	1951	466	300		
G 113	38 24.7N	124 01.2W	5/06	0136	0159	367	300	110	300
G 122	38 06.2N	124 04.7W	5/06	1036	1058	427	300	80	187
G 128	38 33.4N	124 24.9W	5/06	1723	1745	458	300	54	119
G 134	39 01.0N	124 43.9W	5/07	0047	0110	418	300	100	240
G 140	39 27.5N	125 03.0W	5/07	0708	0730	401	305	156	388
G 146	39 36.0N	125 23.1W	5/07	1409	1432	391	300	70	180
G 152	39 09.1N	125 03.5W	5/07	2035	2056	353	300		
G 158	38 43.1N	124 45.2W	5/08	0218	0241	402	300	84	209
G 164	38 15.2N	124 24.2W	5/08	0836	0857	416	300	50	121
G 170	37 46.8N	124 05.3W	5/08	1455	1520	422	300	68	161
G 175	37 55.1N	124 26.5W	5/08	2157	2220	425	300		
G 181	38 24.2N	124 45.8W	5/09	0440	0502	421	300	85	202
G 187	38 50.9N	125 07.8W	5/09	1050	1112	397	300	100	252
G 193	39 17.6N	125 25.9W	5/09	1701	1724	436	300	207	475
G 197	39 24.6N	125 51.4W	5/09	2241	2303	454	300	56	124
G 203	38 57.5N	125 33.8W	5/10	0539	0602	466	300	72	153
G 209	38 32.4N	125 12.1W	5/10	1150	1213	447	300	64	143
G 215	38 03.6N	124 51.9W	5/10	1836	1900	485	300	38	79
G 221	37 34.5N	124 32.2W	5/11	0146	0210	438	300	31	71
G 224	37 12.2N	124 40.0W	5/11	0733	0755	433	300	105	243
G 230	37 41.3N	124 59.2W	5/11	1416	1439	474	302	48	102
G 236	38 10.2N	125 19.7W	5/11	2133	2158	444	300	70	159
G 242	38 39.1N	125 39.1W	5/12	0419	0443	448	300	63	141
G 248	39 04.4N	125 59.3W	5/12	1045	1107	436	300	156	357
N 37*	38 00.3N	123 11.3W	5/18	1554	1602	267	90	11	41
N 38*	38 05.0N	123 13.2W	5/18	1713	1722	306	100	31	101
N 39*	38 09.2N	123 15.9W	5/18	1837	1846	304	100	48	158
N 40*	38 13.2N	123 19.2W	5/18	2036	2047	397	150	62	156
N 41*	38 17.8N	123 22.5W	5/18	2242	2256	427	150	43	101
N 42*	38 22.1N	123 24.8W	5/19	0012	0025	427	180	73	171
N 43	38 19.6N	123 30.7W	5/19	0250	0306	311	200	18	58
N 46	38 14.1N	123 43.6W	5/19	0753	0815	436	300	92	212
N 48	38 07.1N	123 38.6W	5/19	1108	1133	479	284	171	357
N 50	38 00.2N	123 33.4W	5/19	1443	1507	463	300	112	241
N 66	37 45.9N	124 17.4W	5/20	0817	0838	463	300	172	371
N 70	37 26.9N	124 23.8W	5/20	1233	1258	486	302		
N 82	37 32.8N	124 26.4W	5/21	0215	0240	435	307	44	100

* Meter net tow

CRUISE SQ87 G 3



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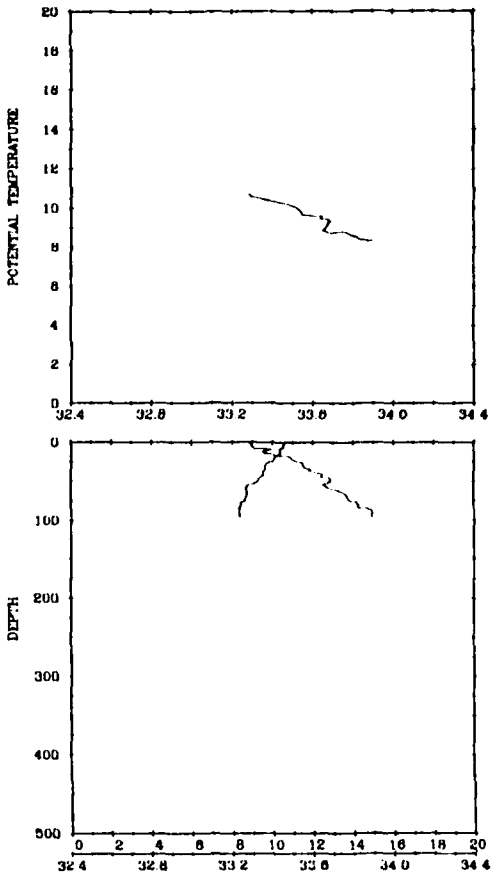

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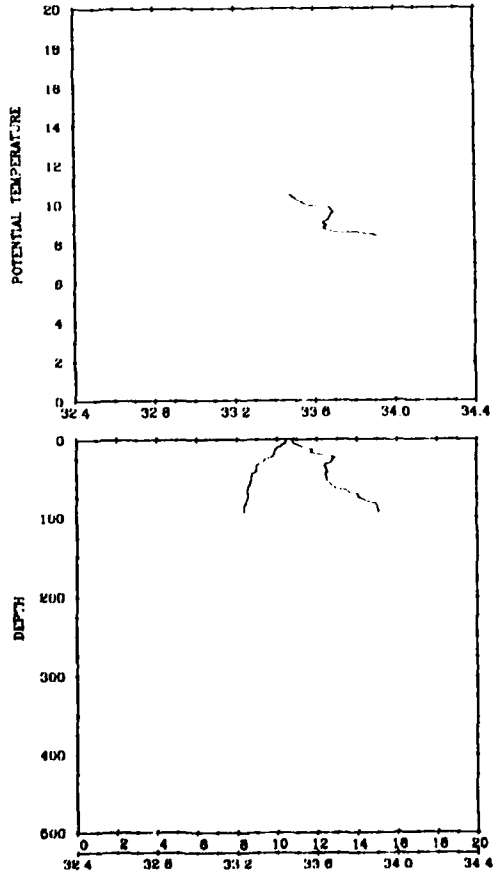

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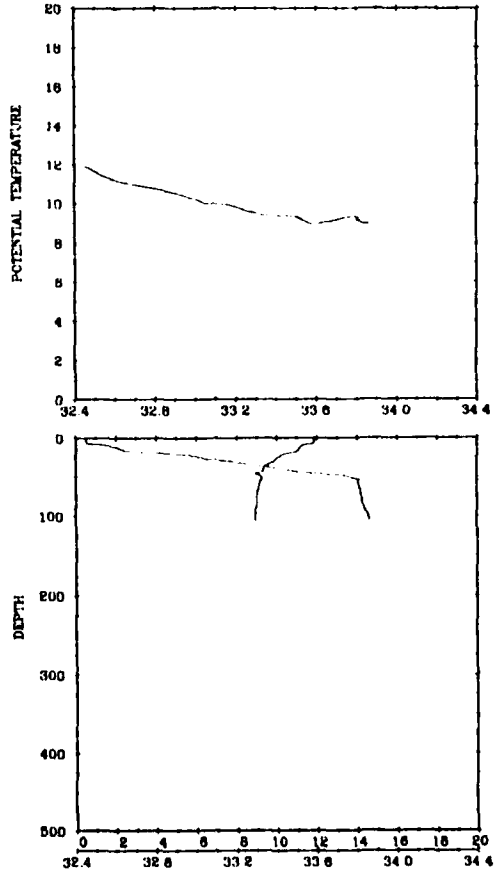

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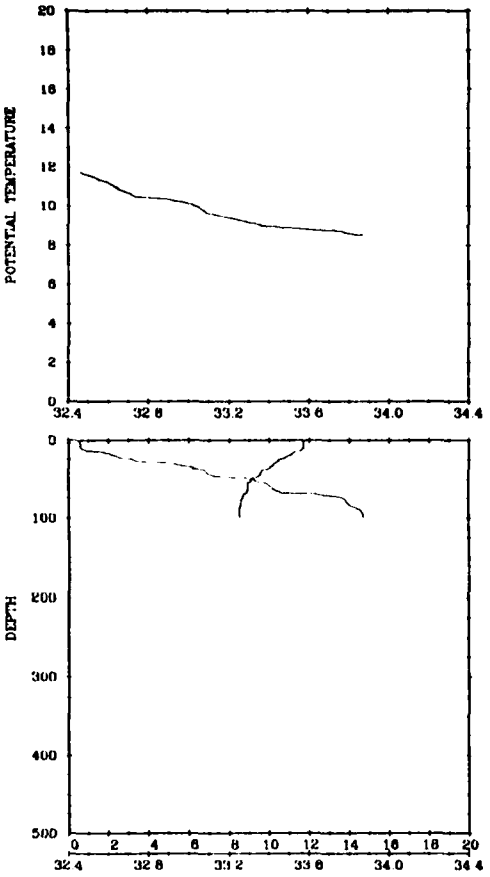

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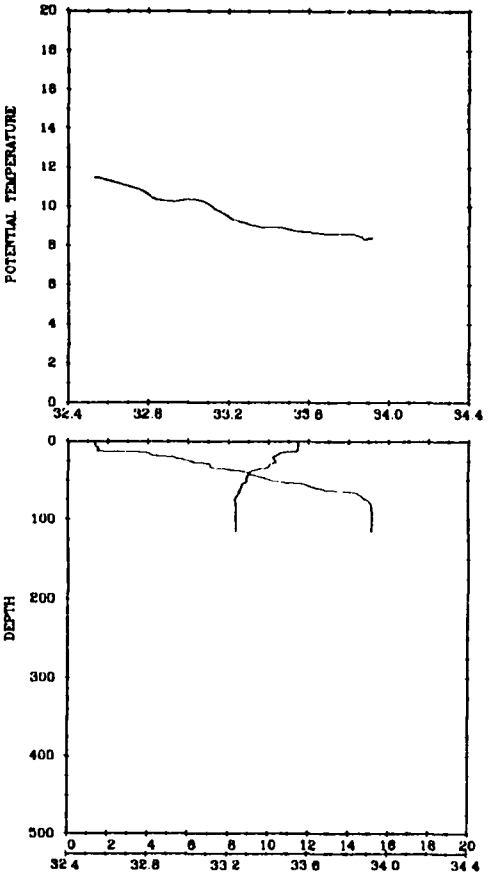

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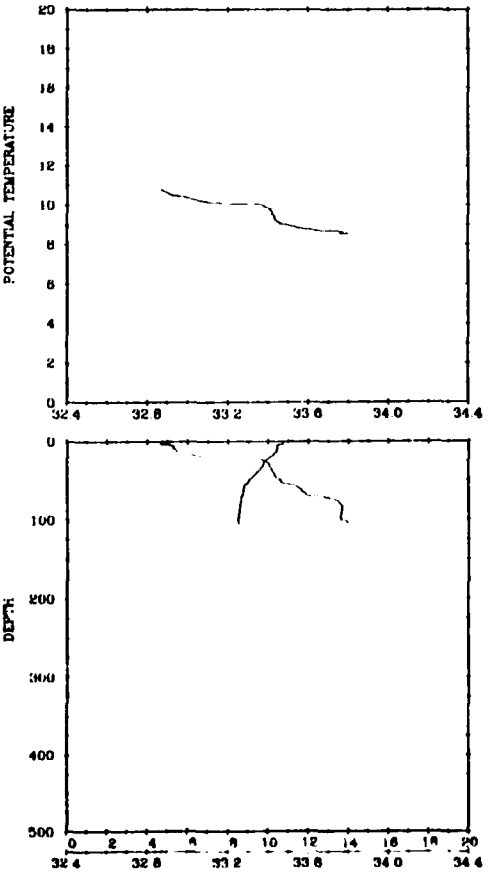

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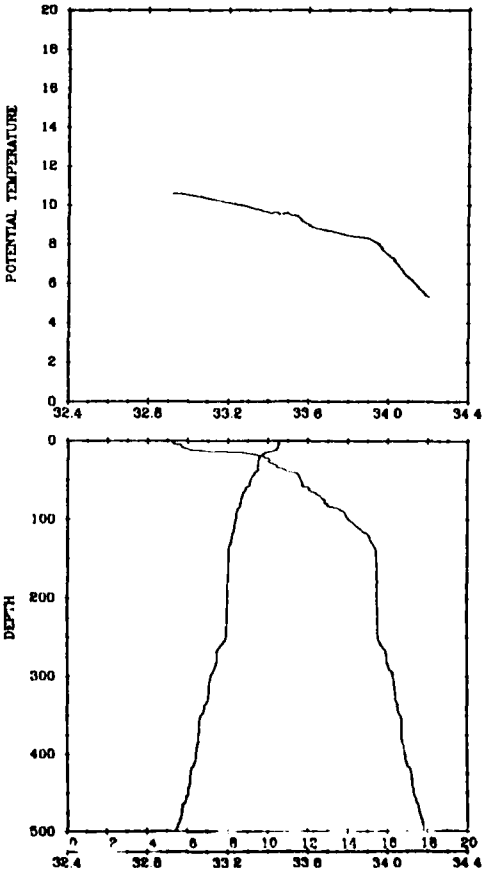

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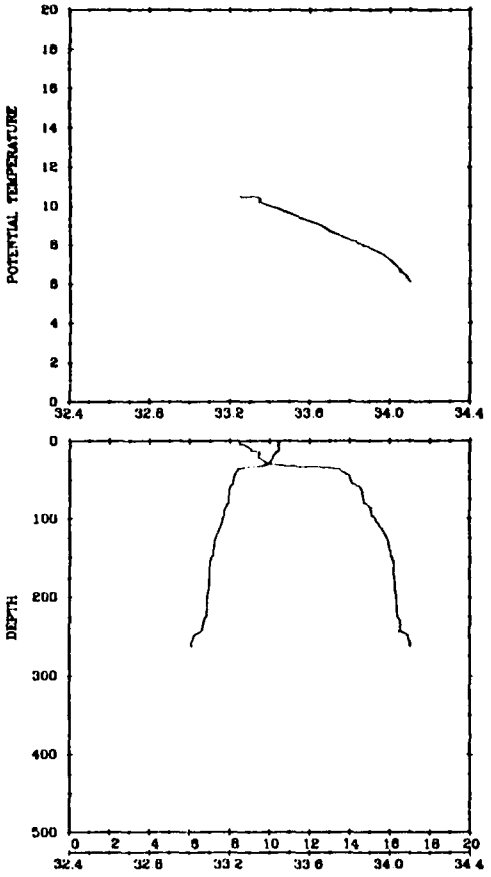

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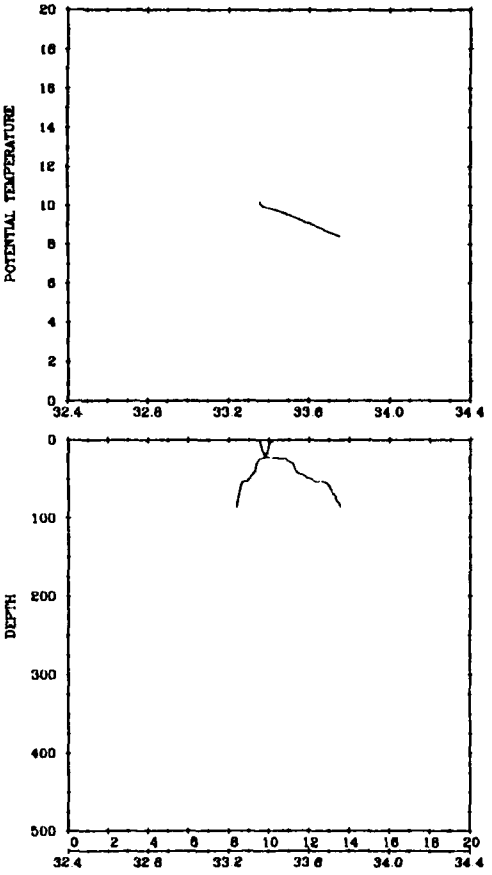

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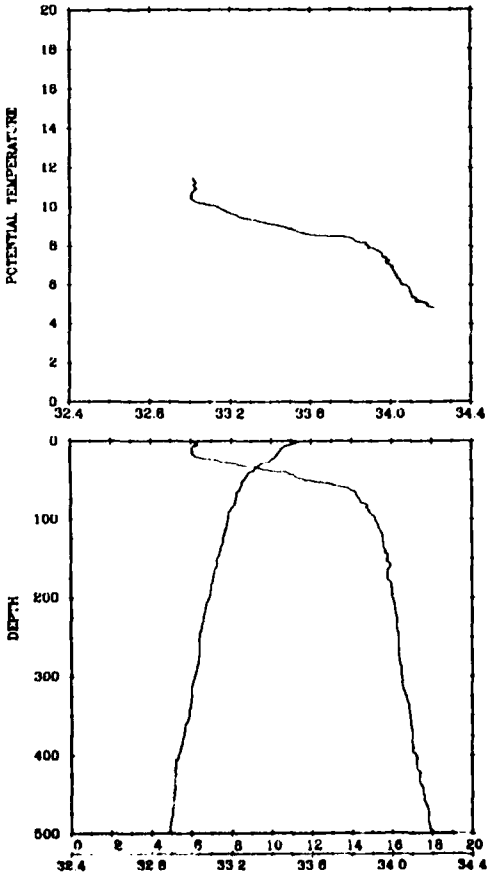

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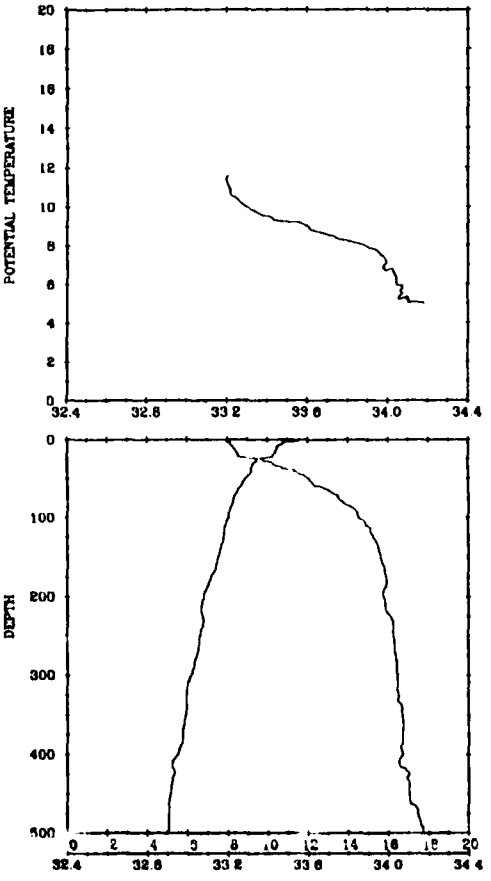

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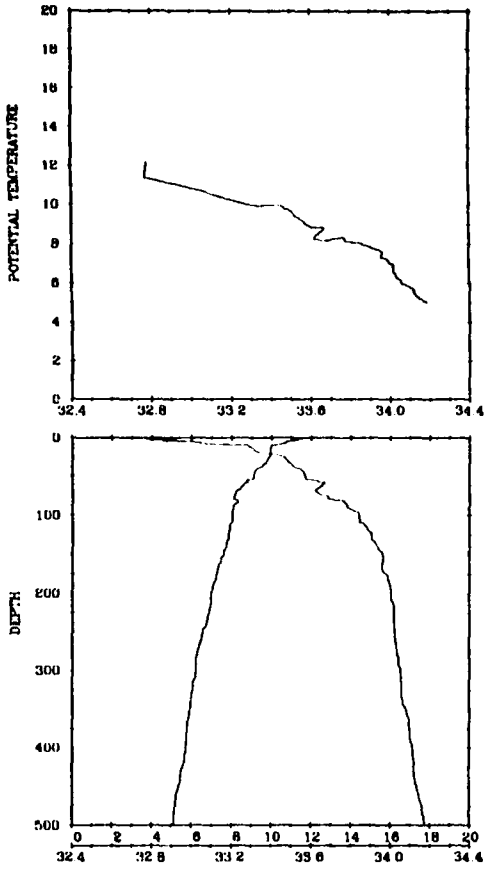

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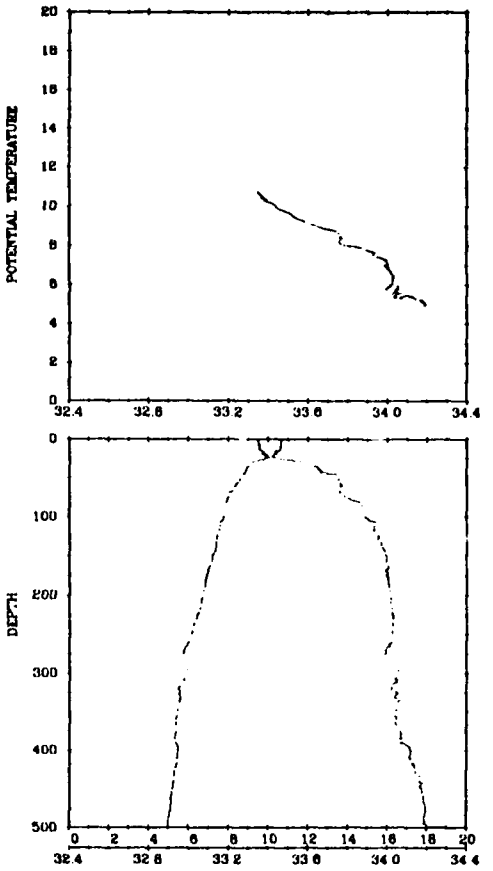

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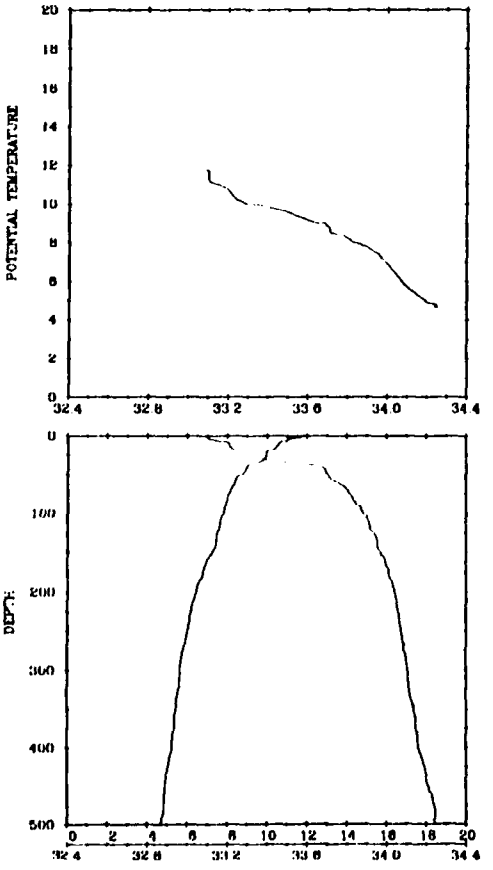

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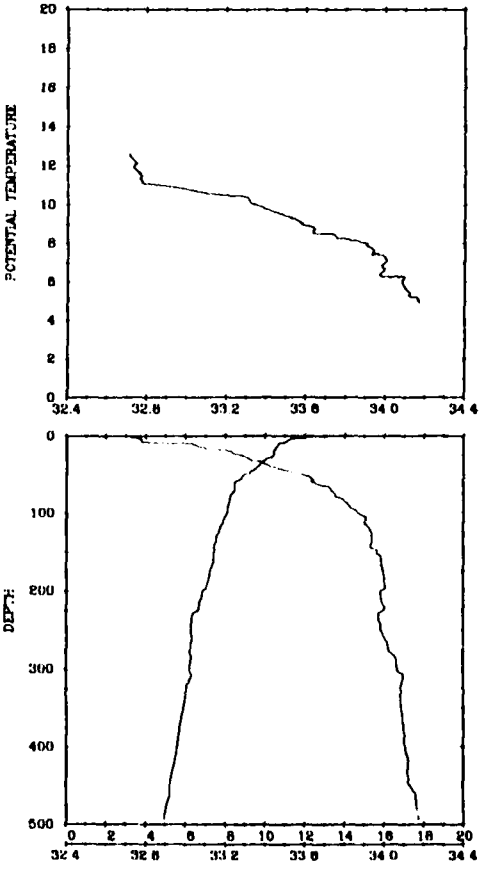

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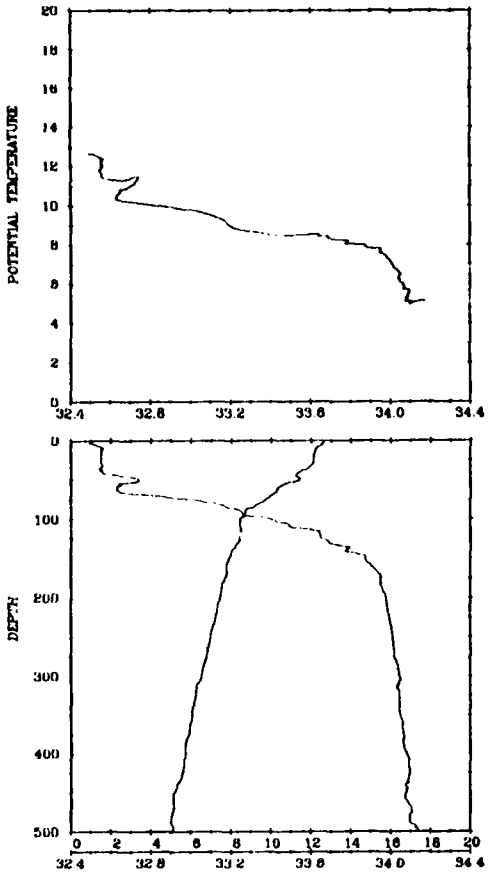

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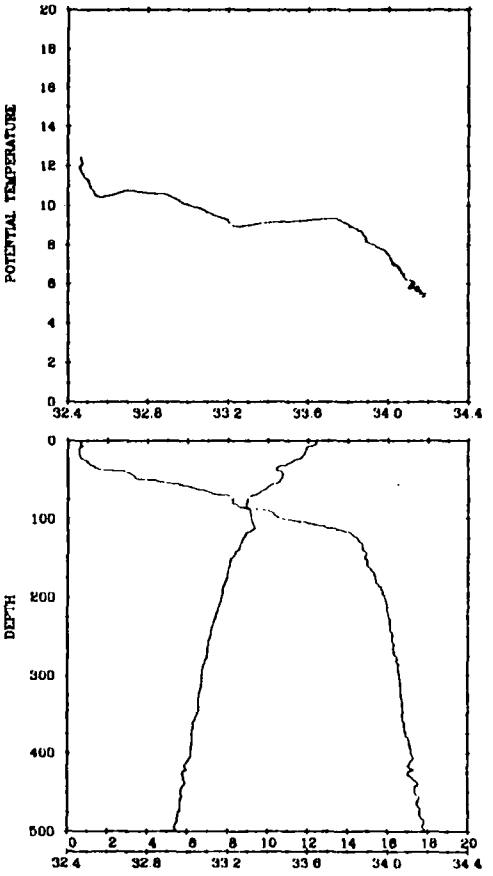
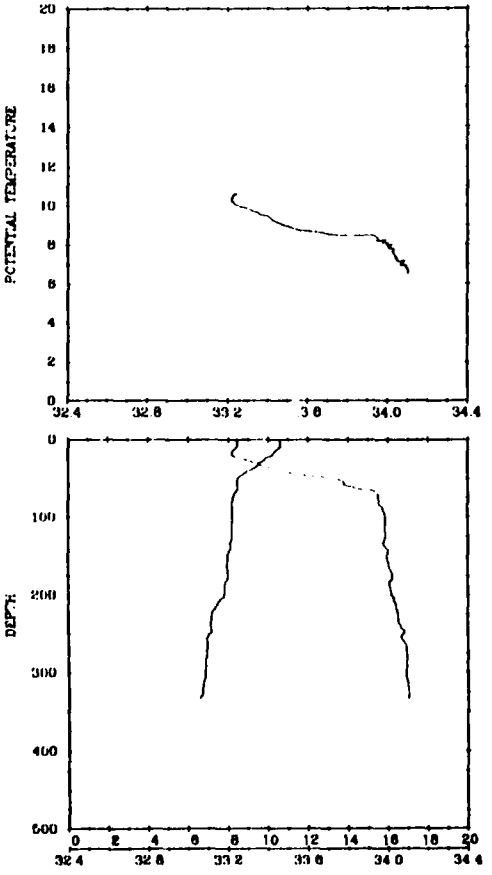


CRUISE SQ87 C 58



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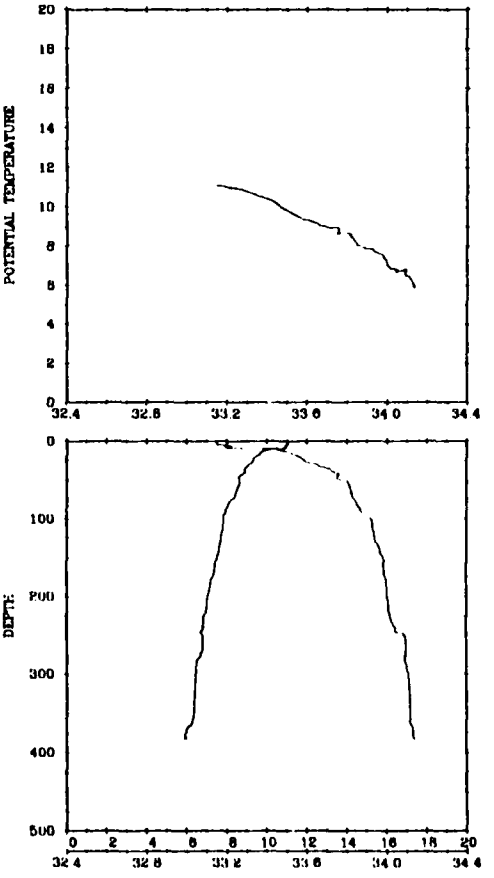
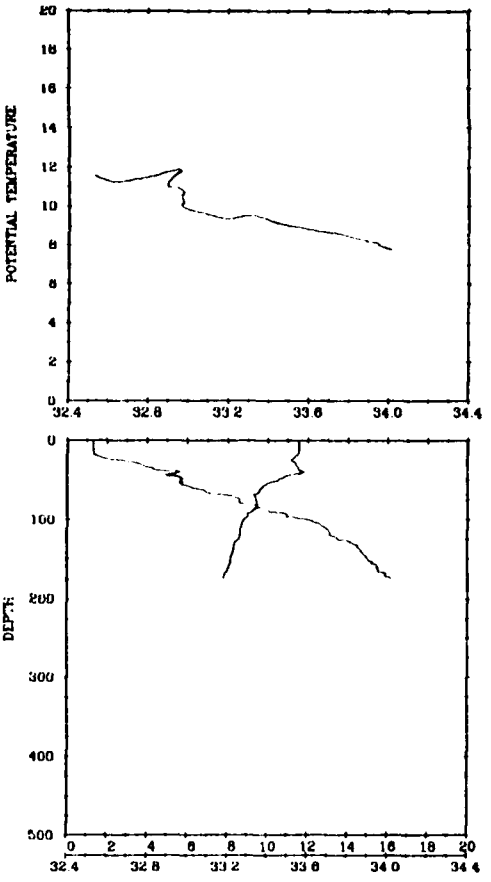


CRUISE SQ87 G 64



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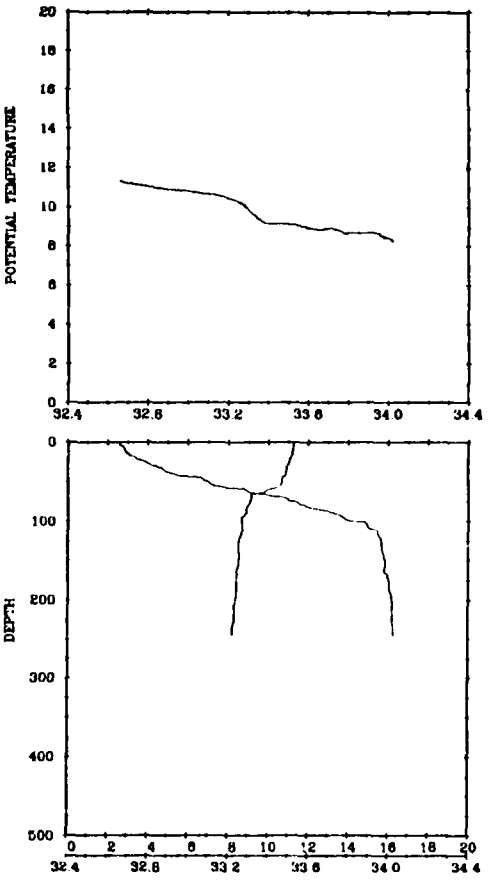
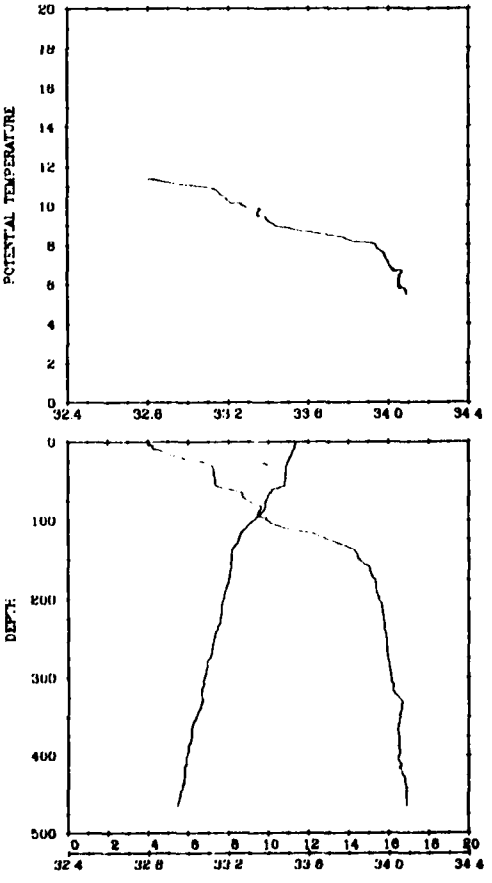
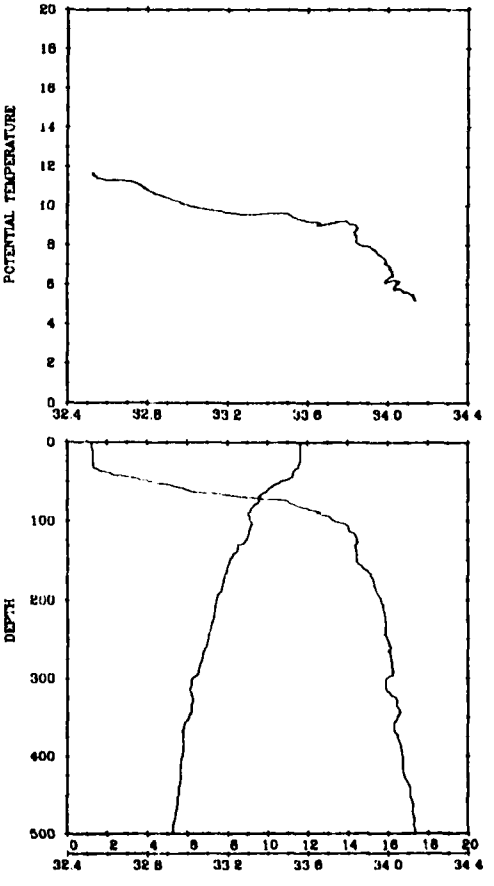


CRUISE SQ87 G 67



CRUISE SQ87 G 71



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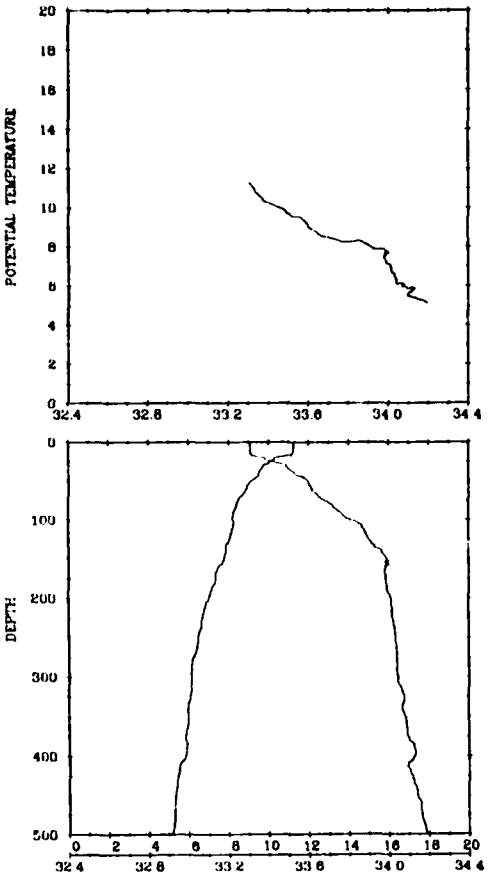

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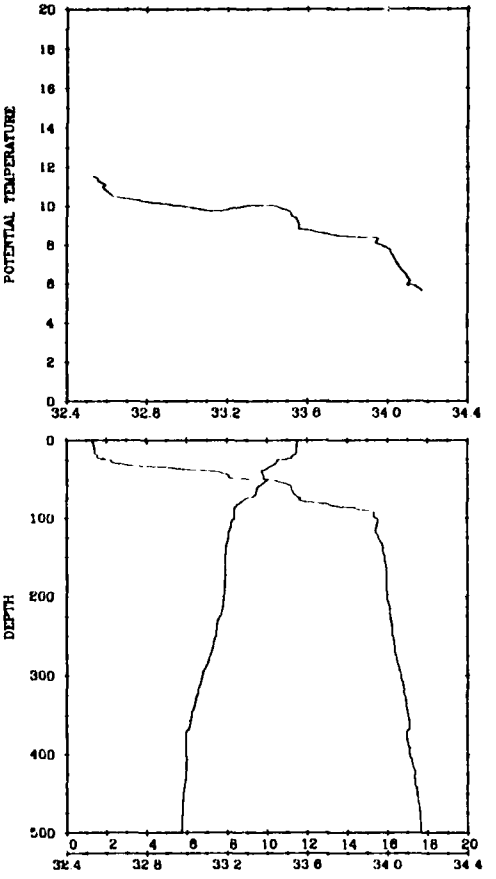

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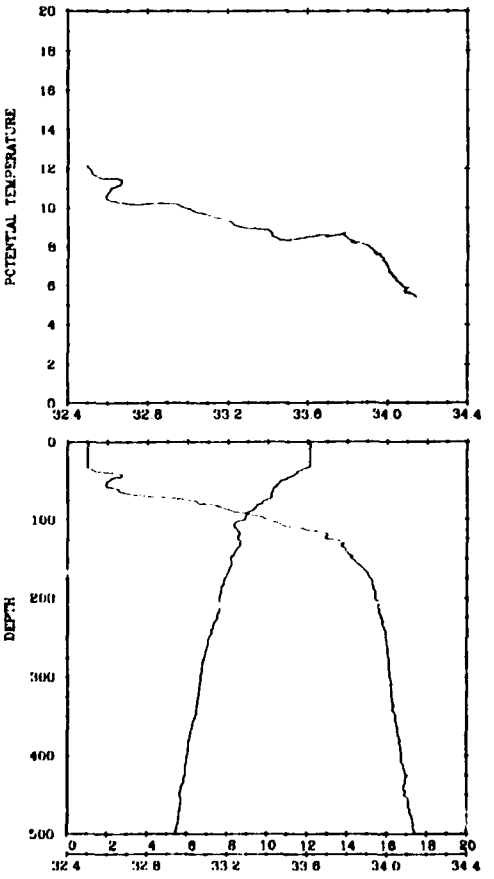

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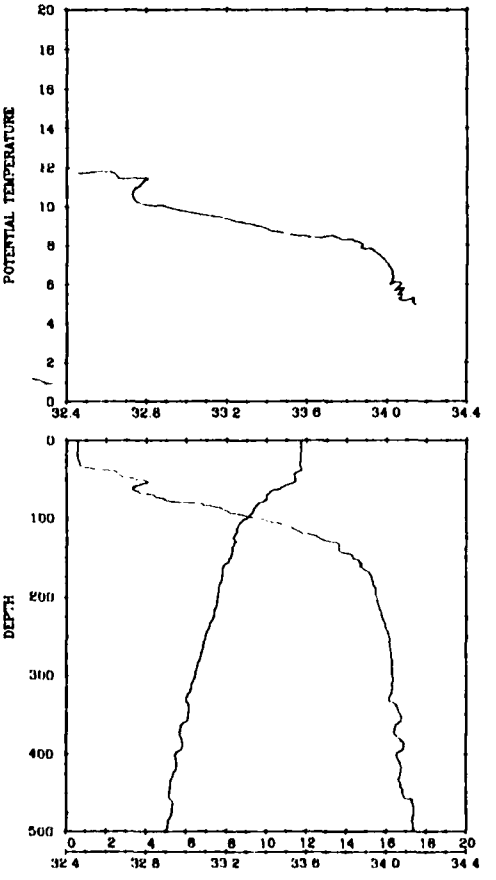

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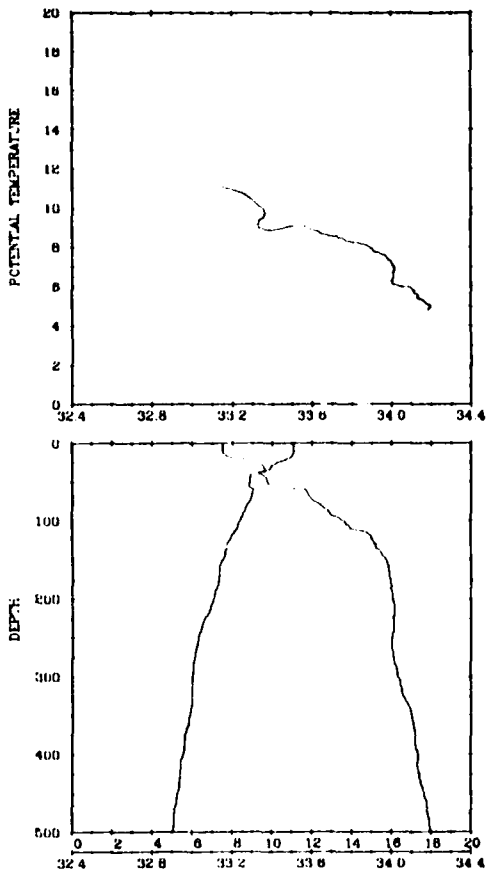

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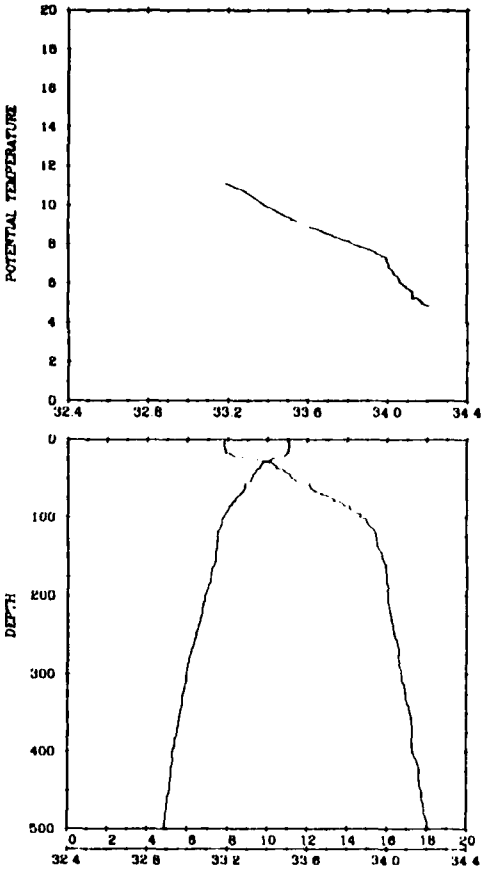

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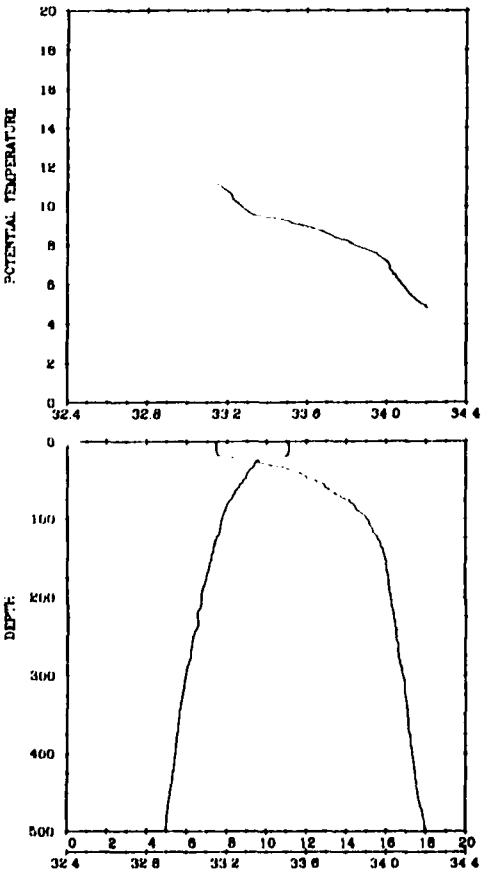

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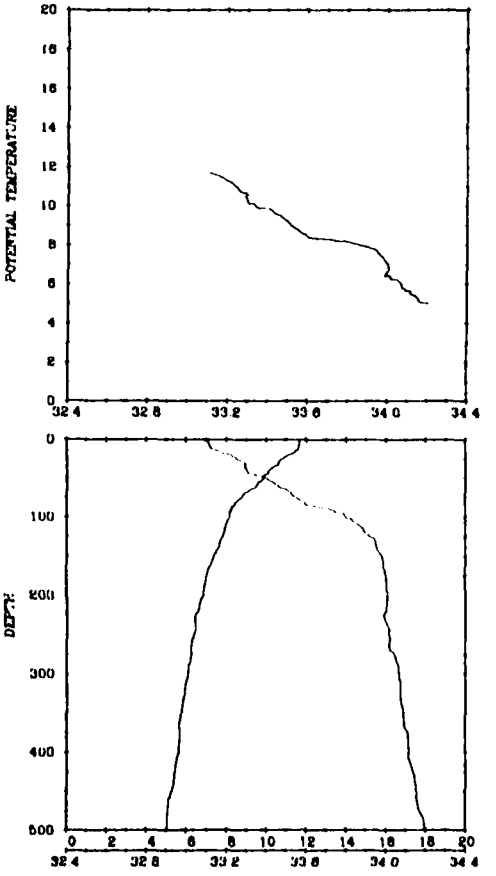

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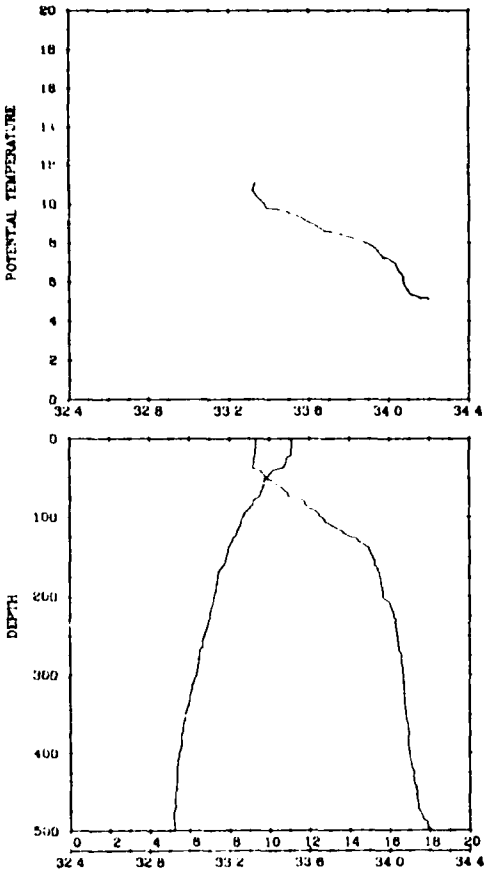

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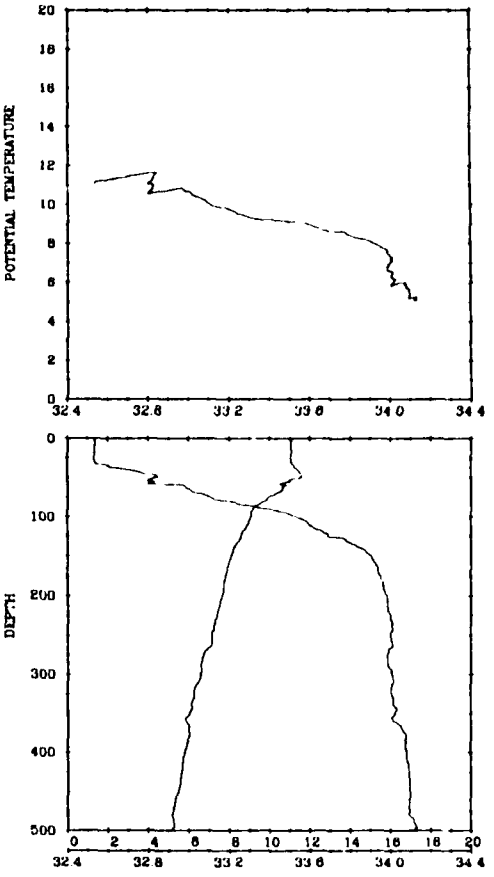

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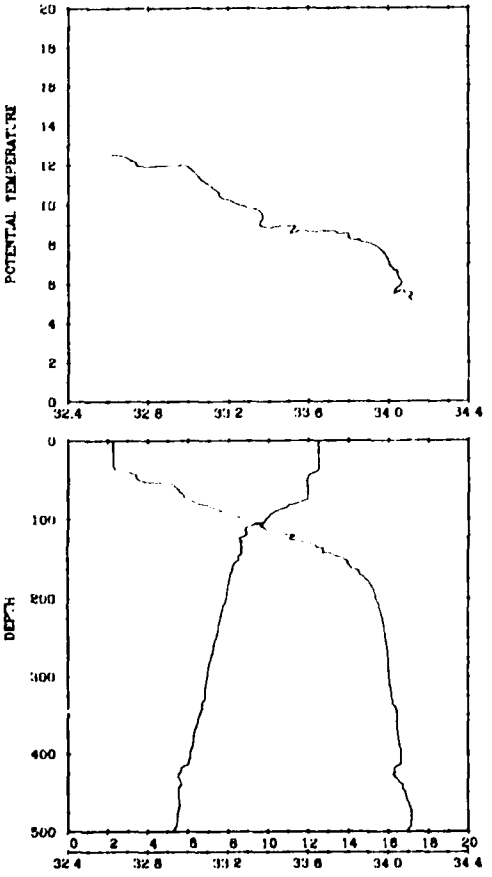

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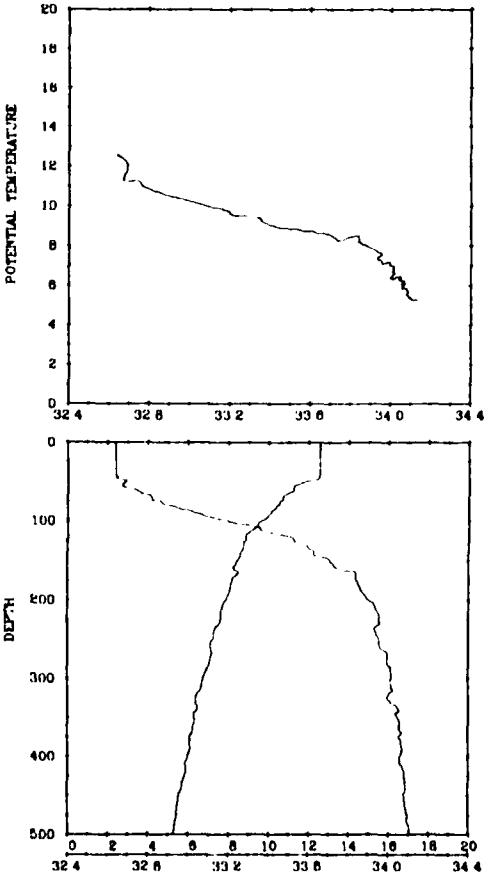

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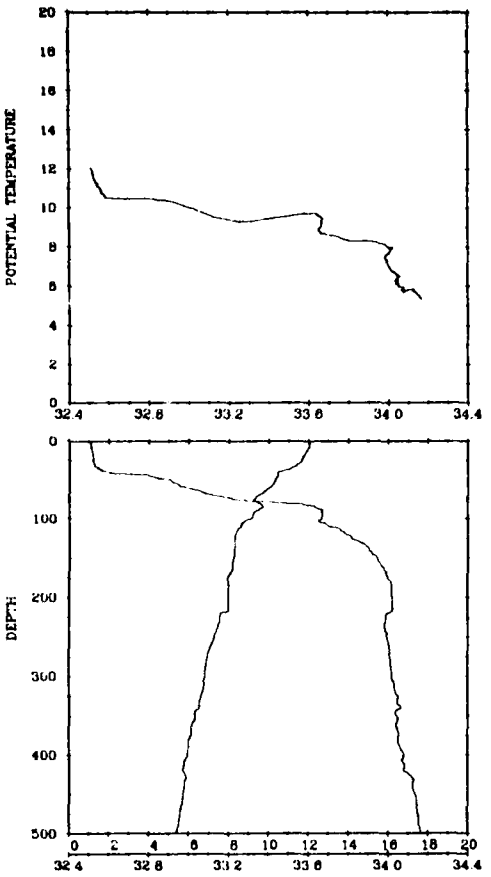

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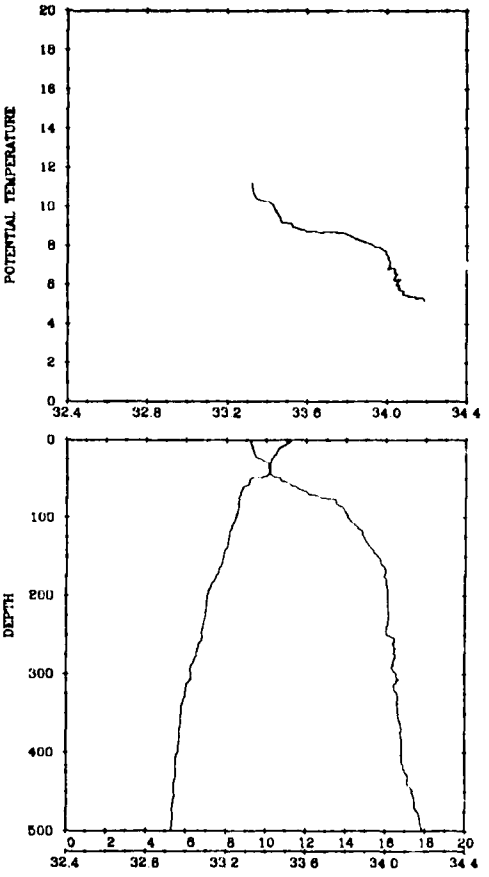

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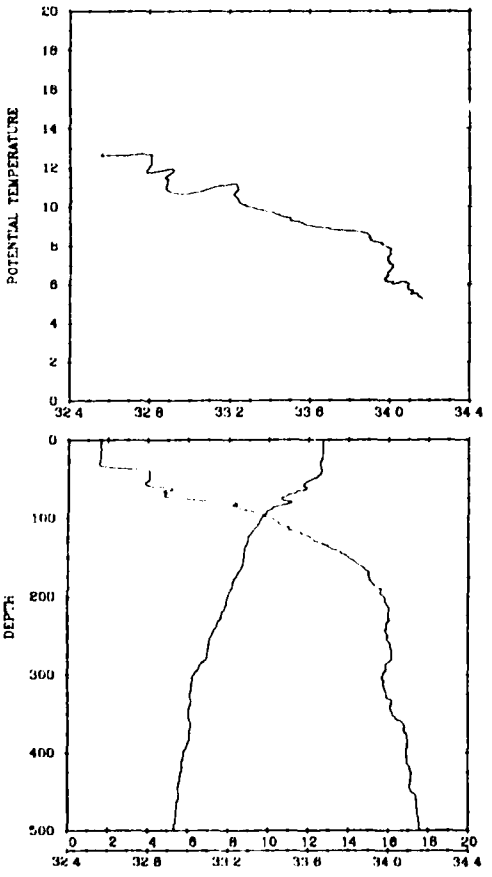

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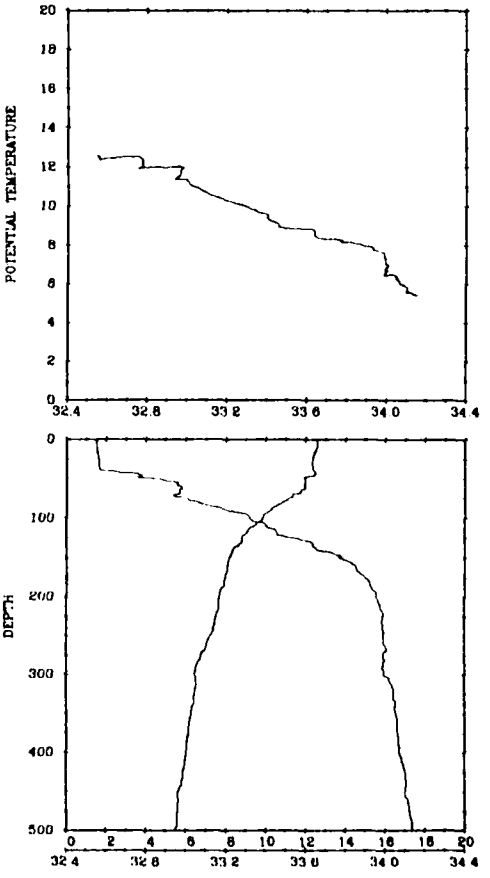

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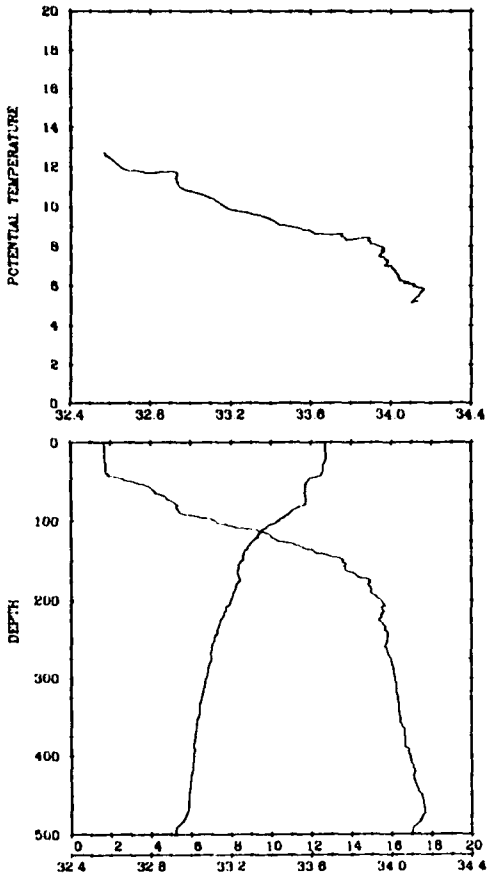

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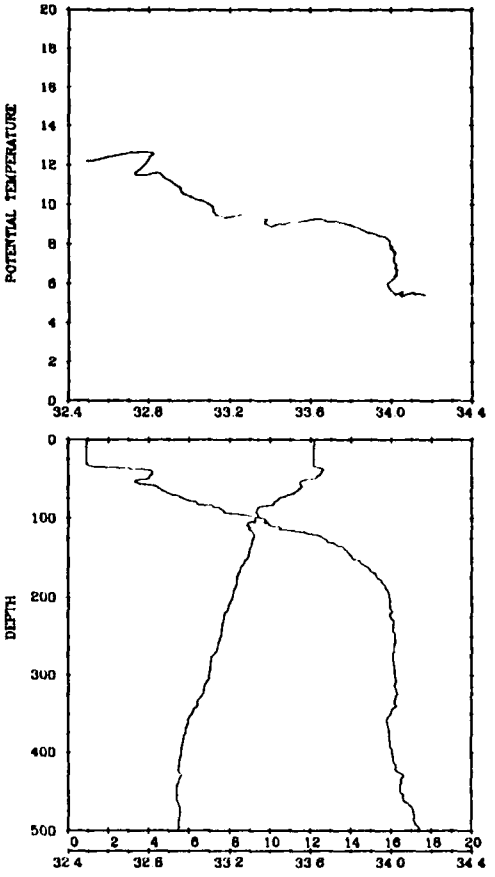

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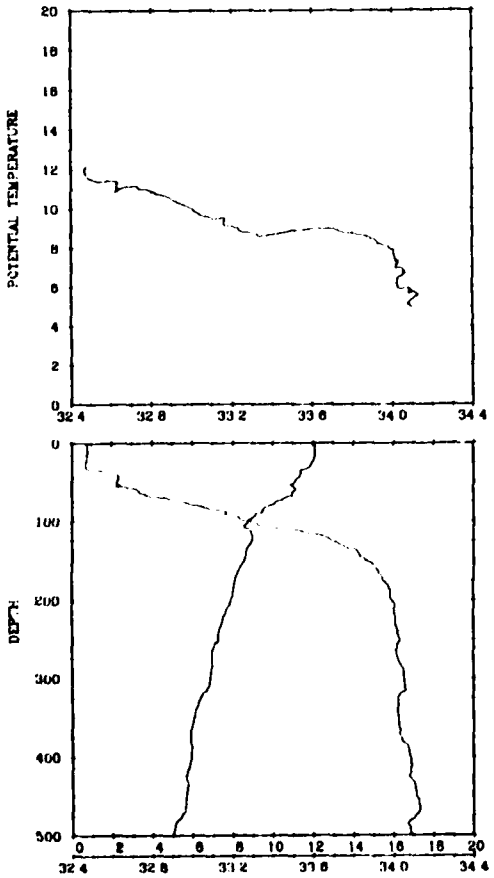

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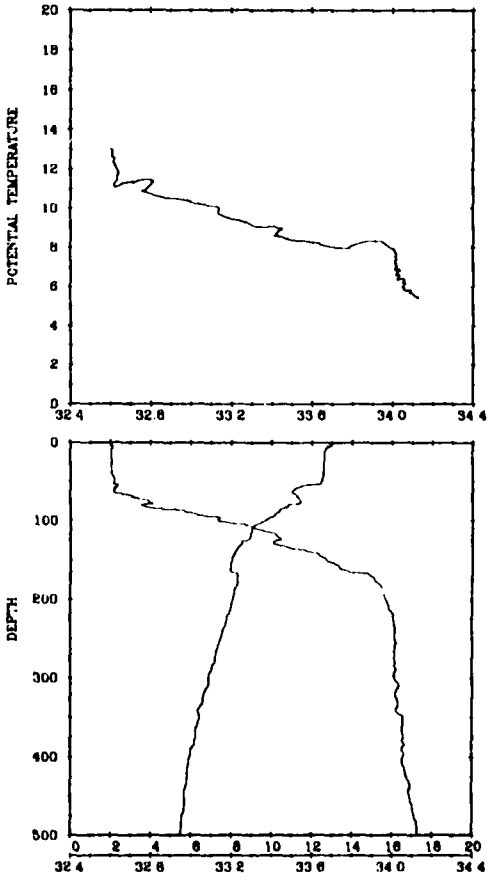

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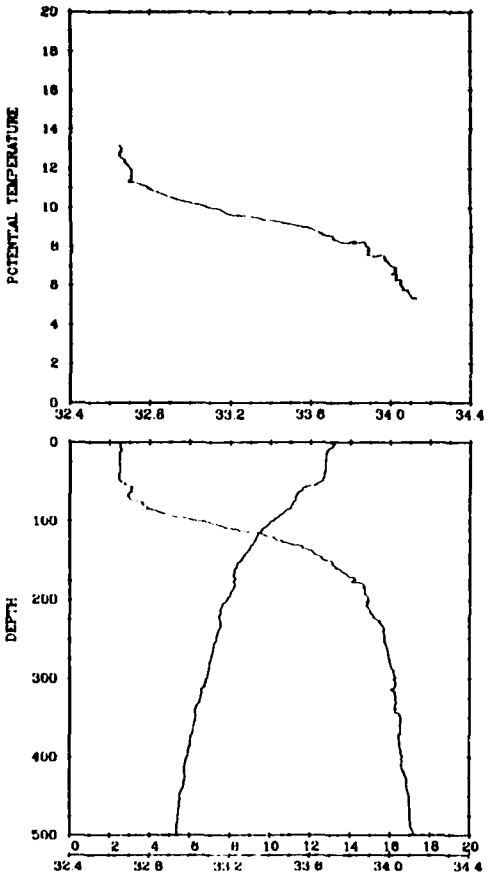

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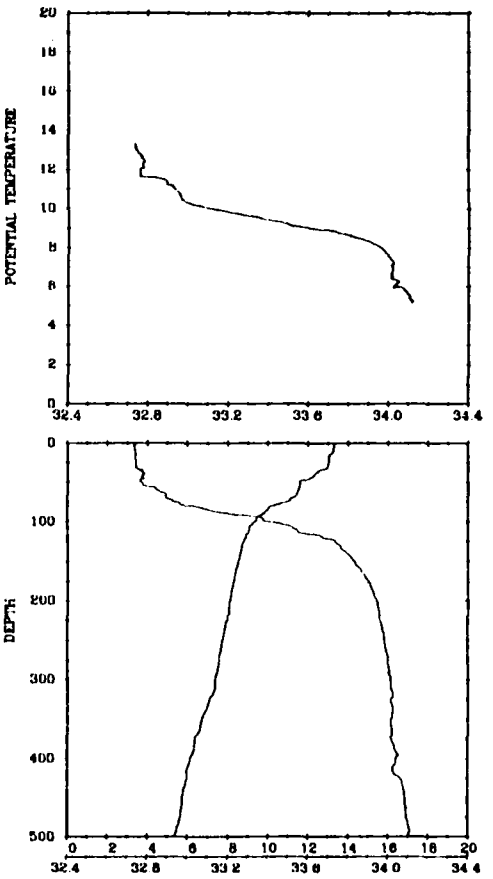

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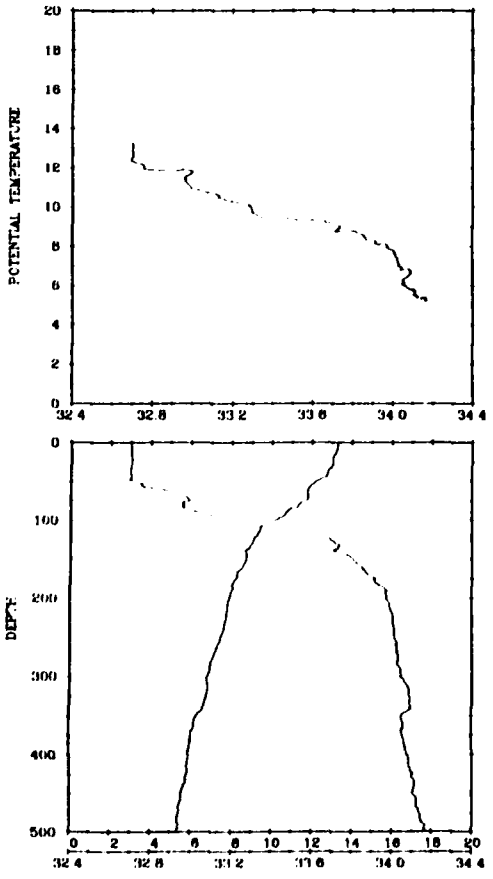

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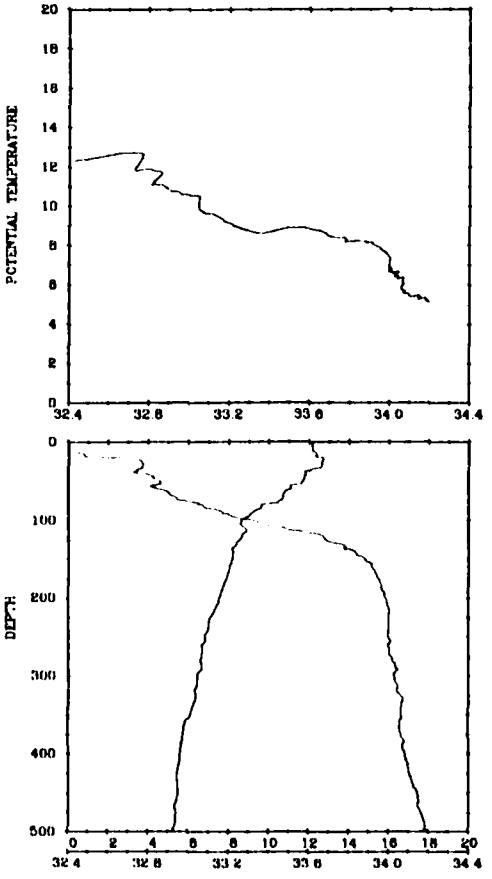

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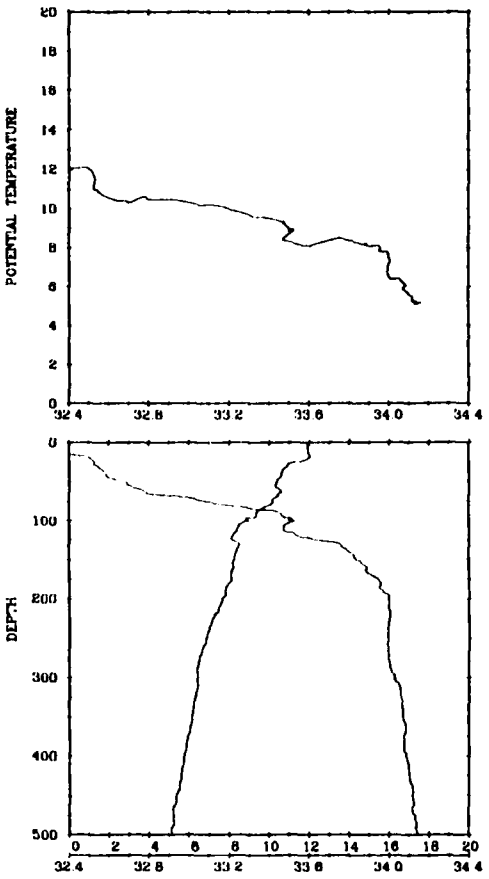

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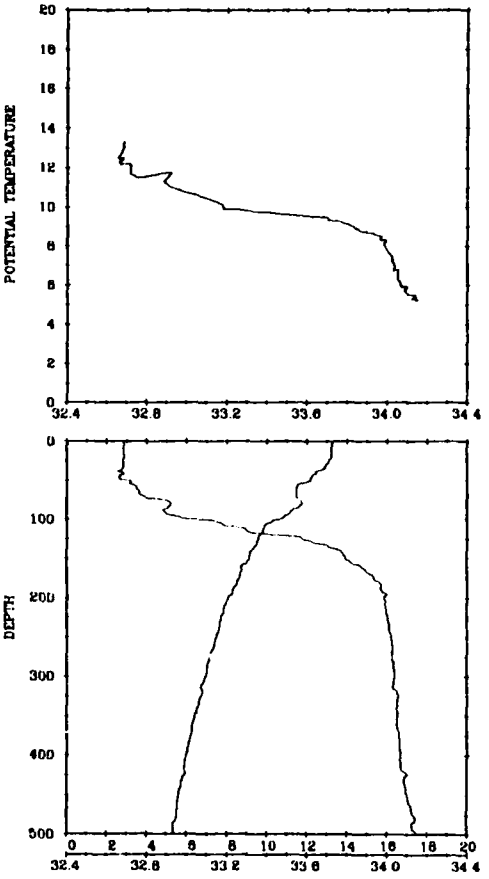

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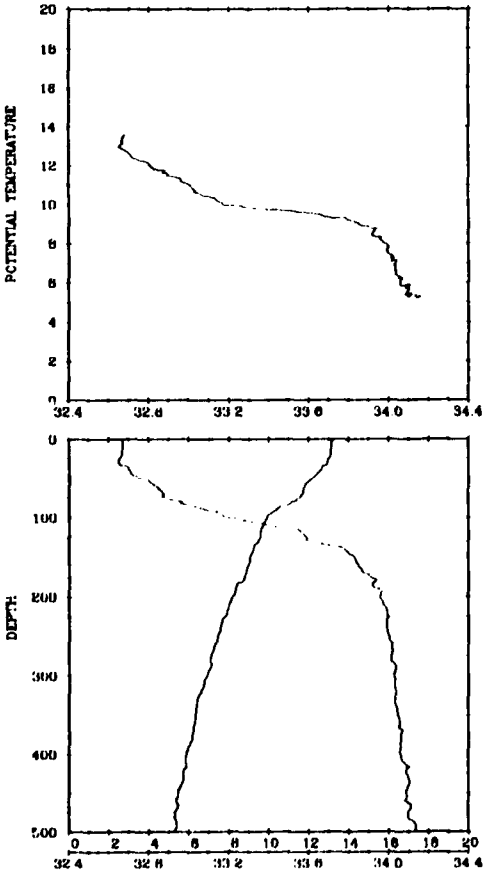

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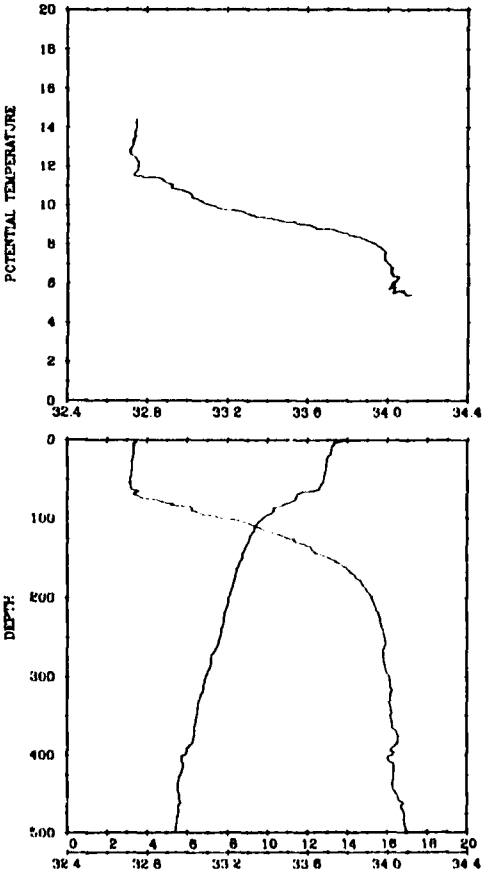
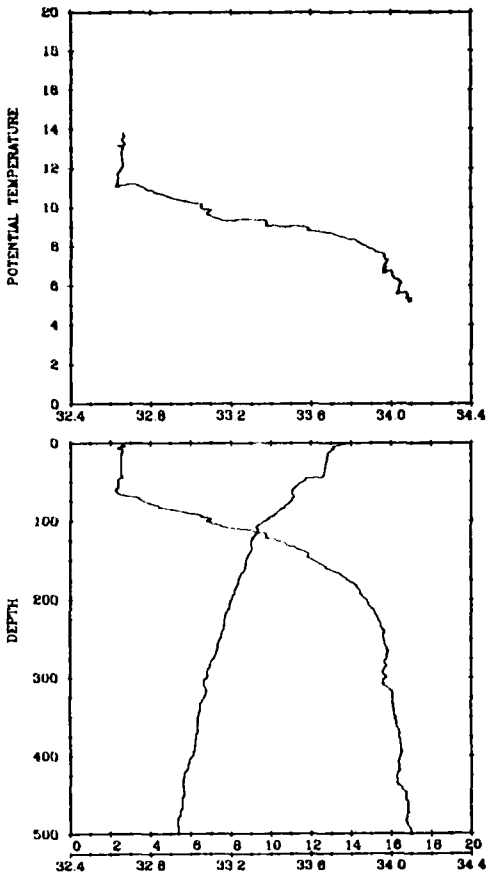


CRUISE SQ87 G 156



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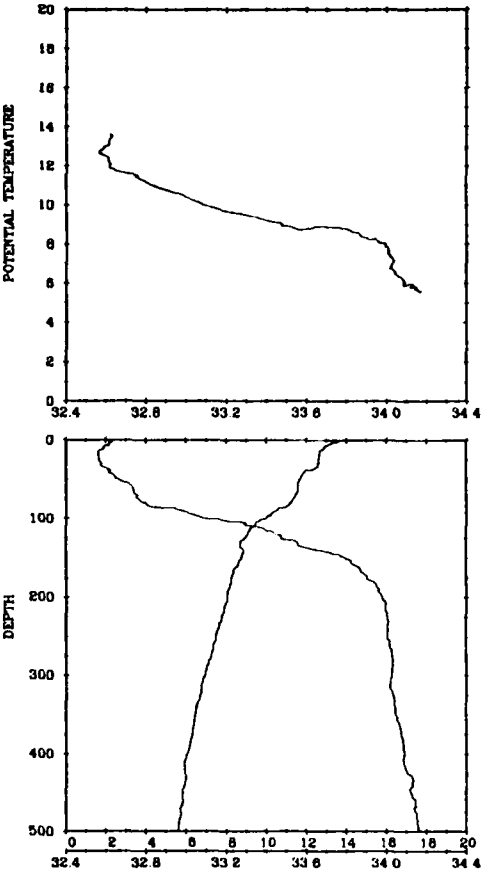

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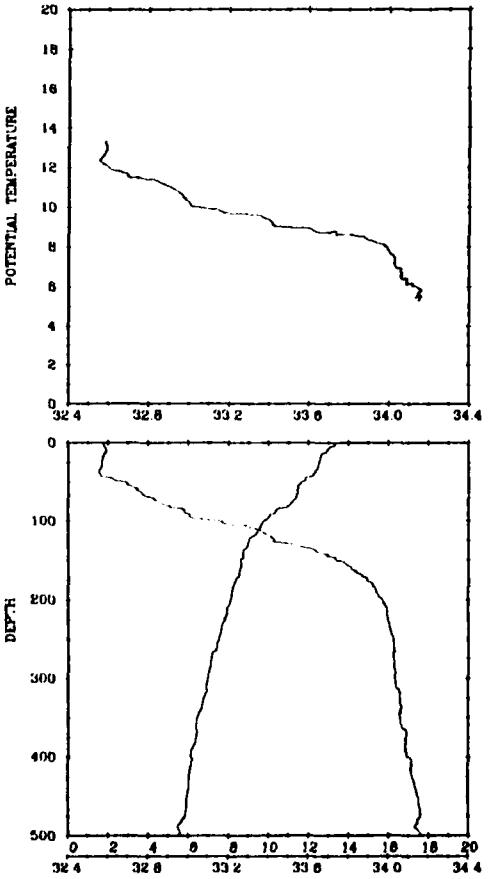

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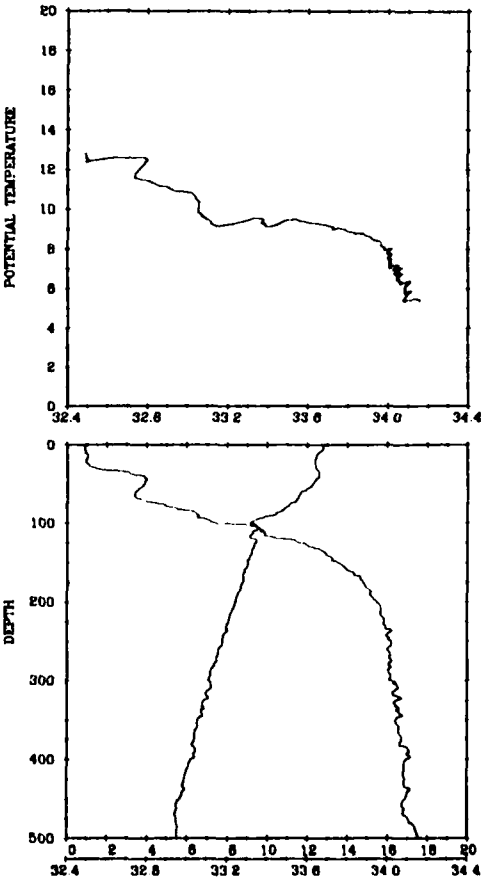

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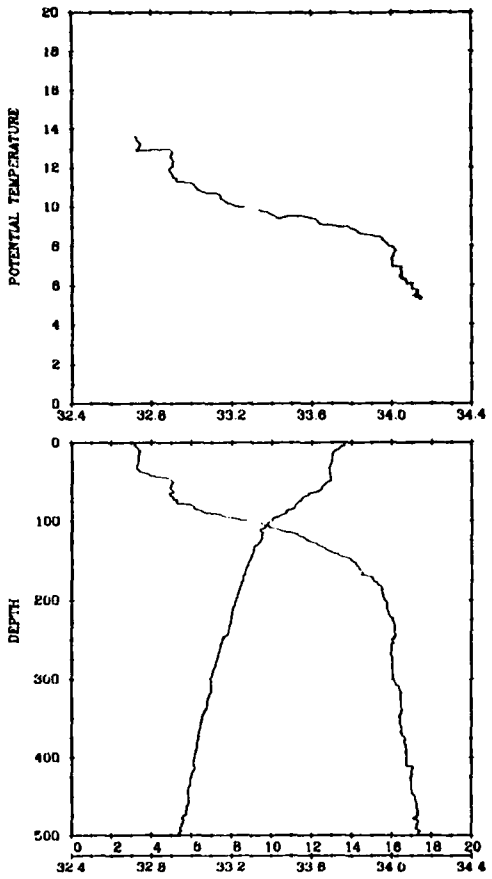

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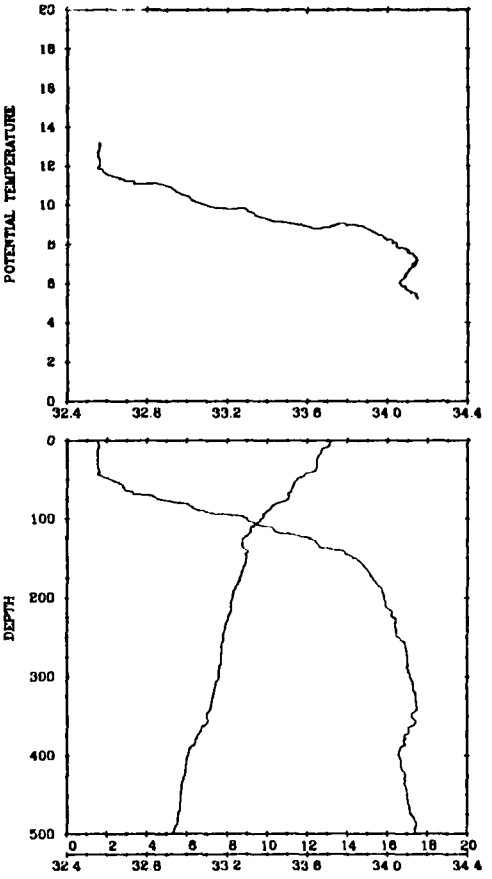

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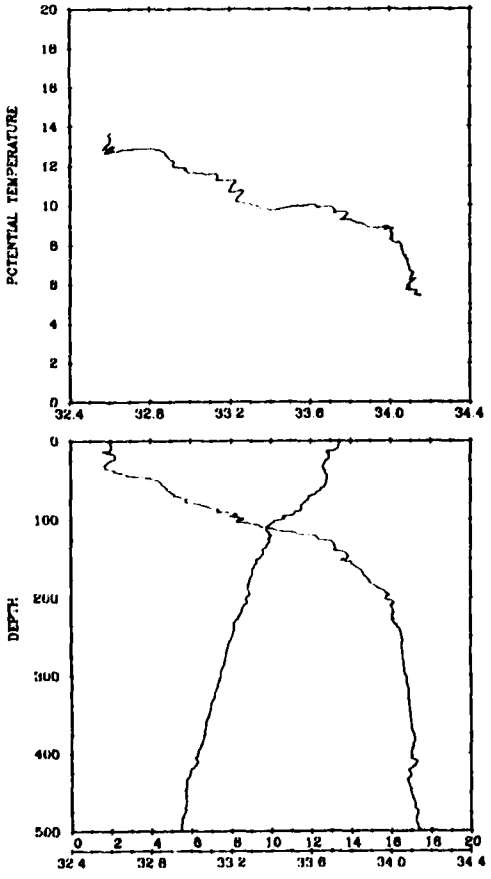

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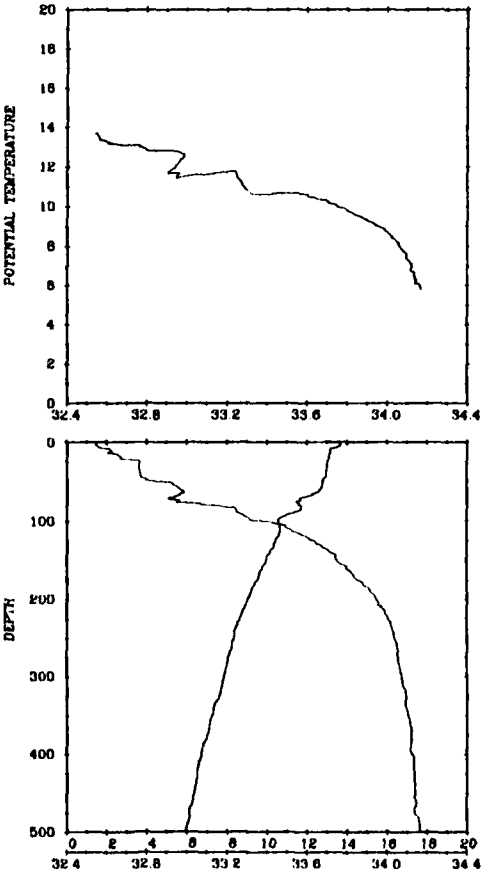

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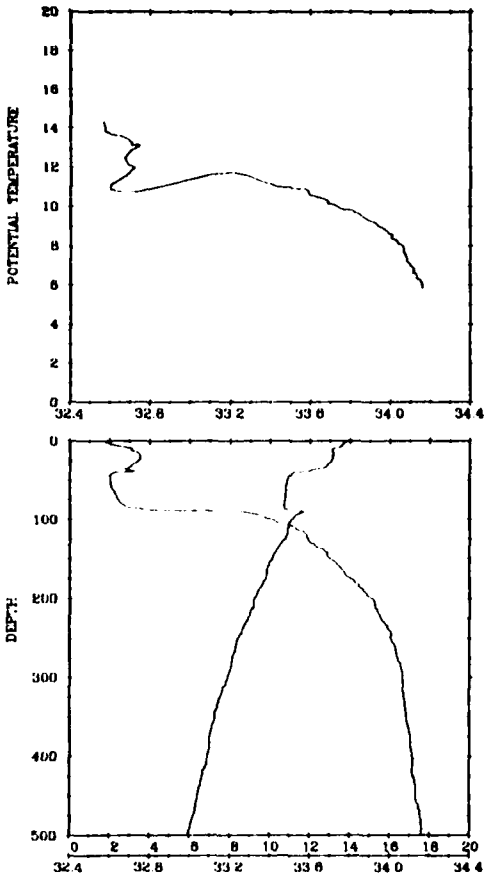

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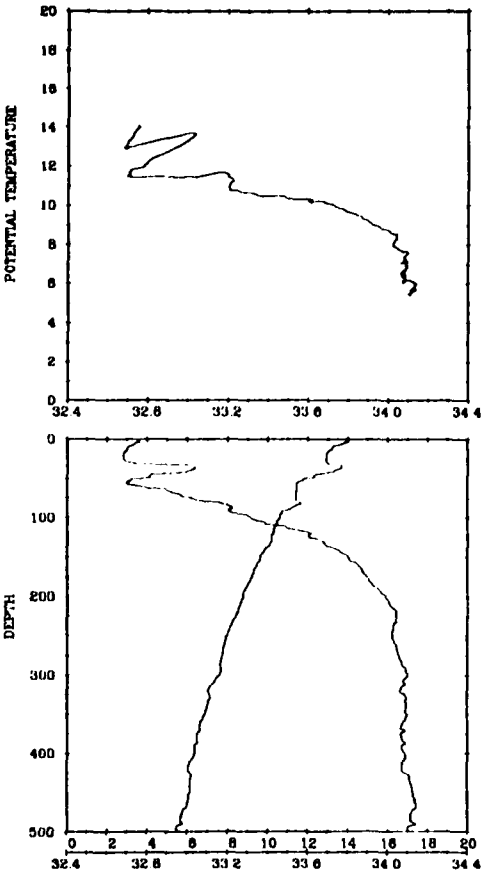

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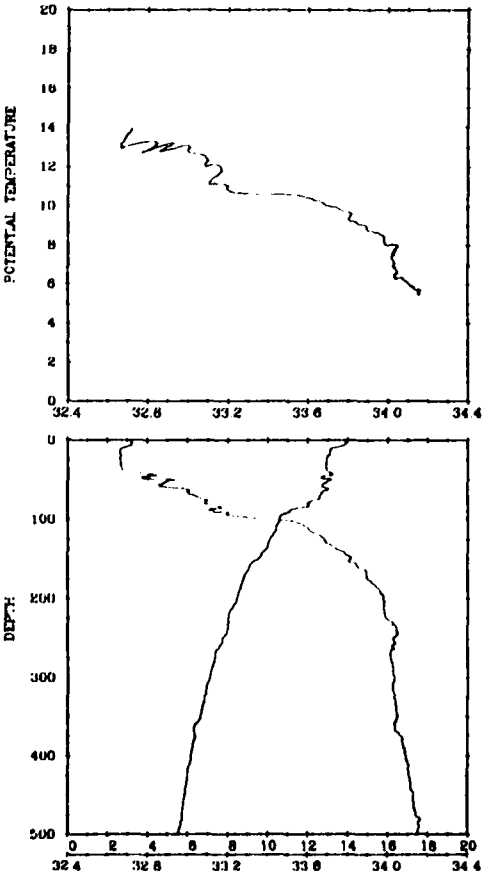

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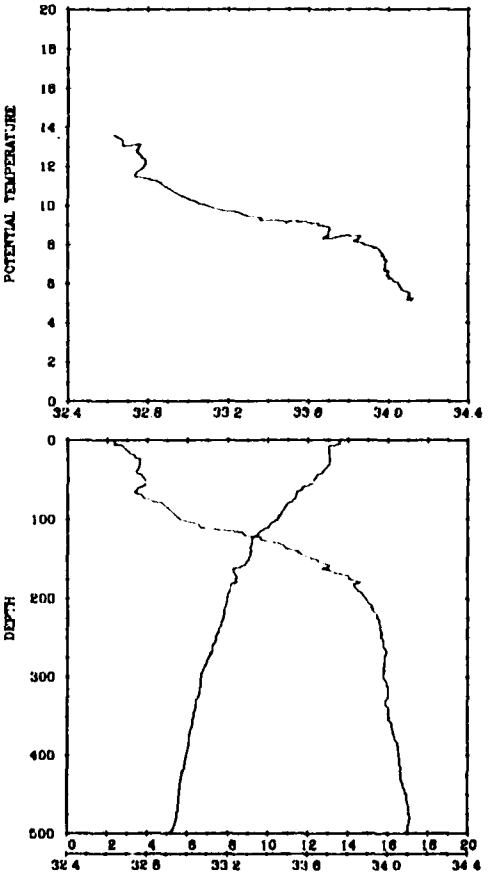

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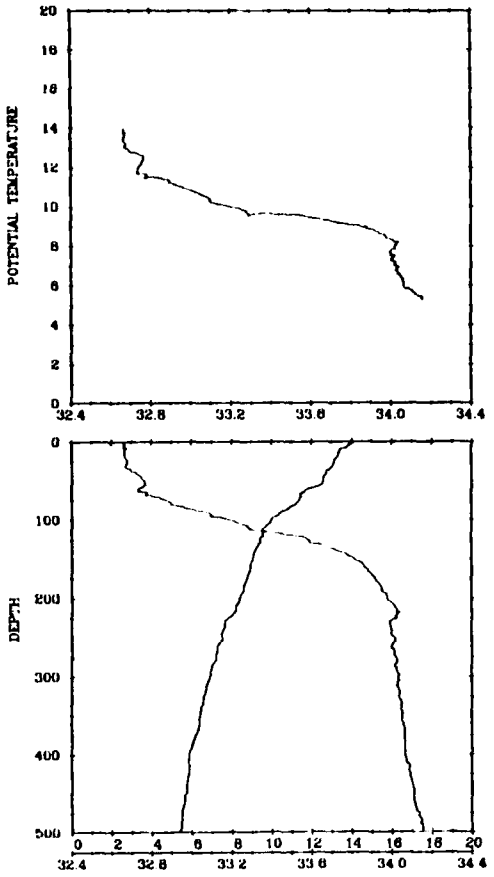

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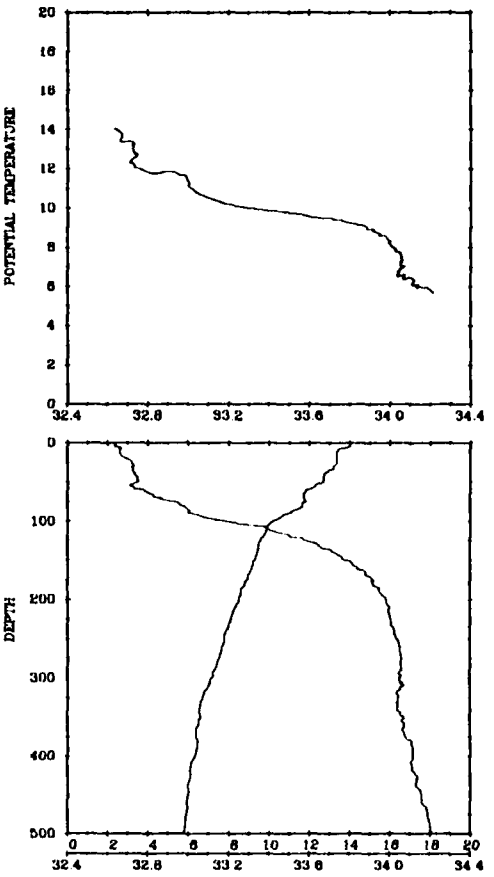

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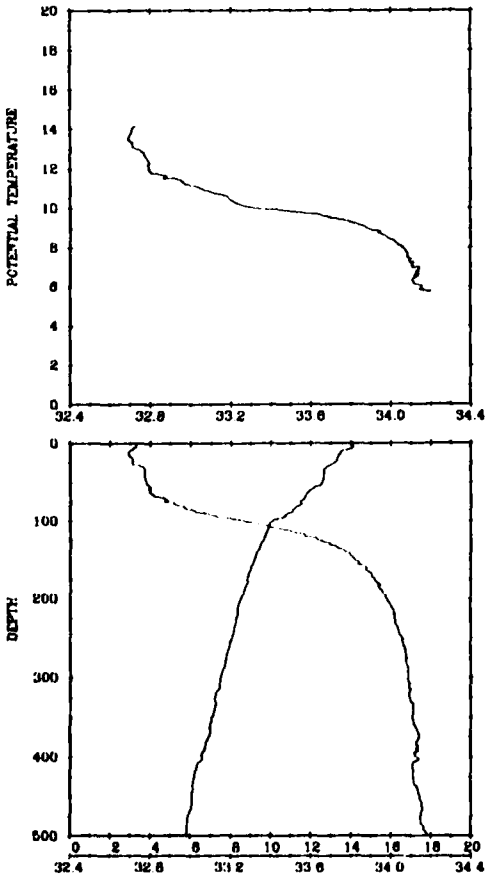

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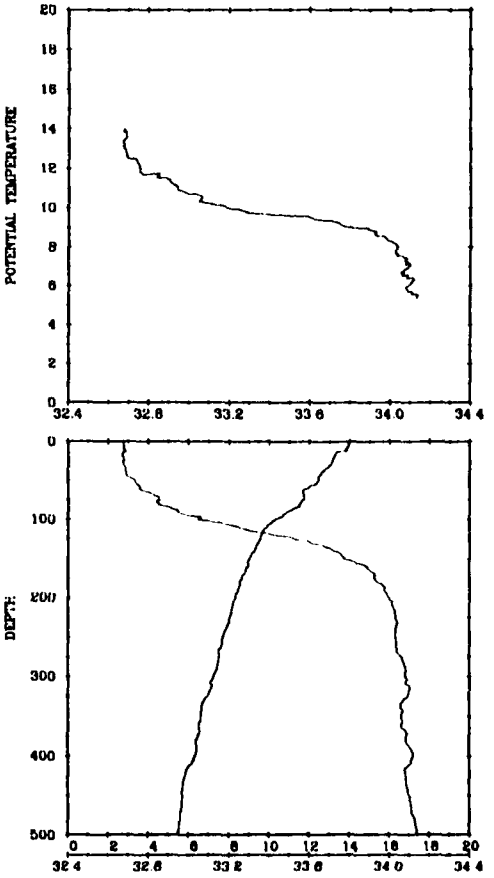

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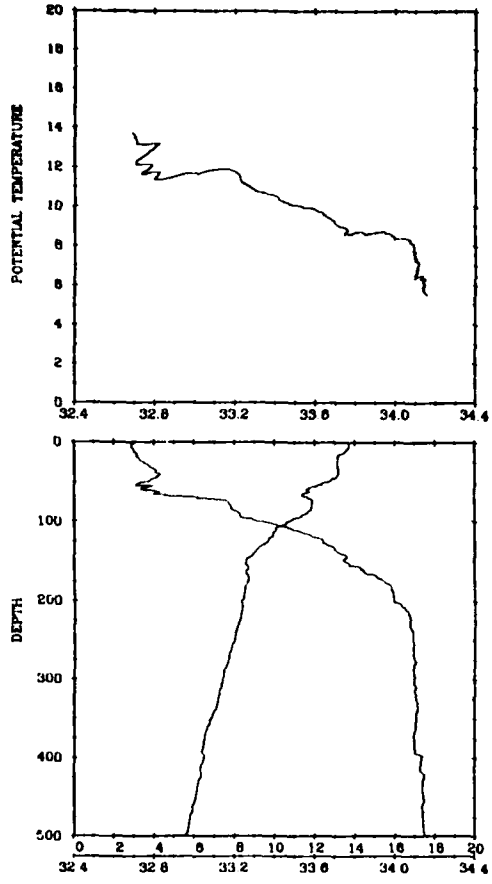

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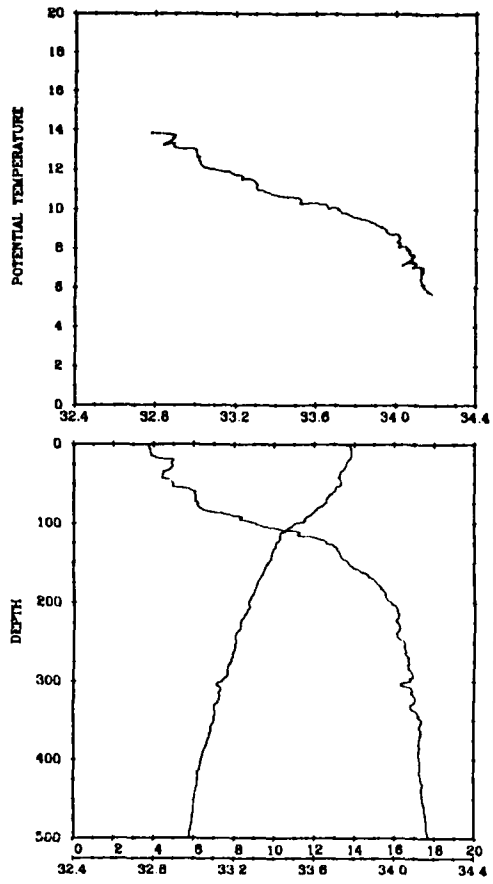

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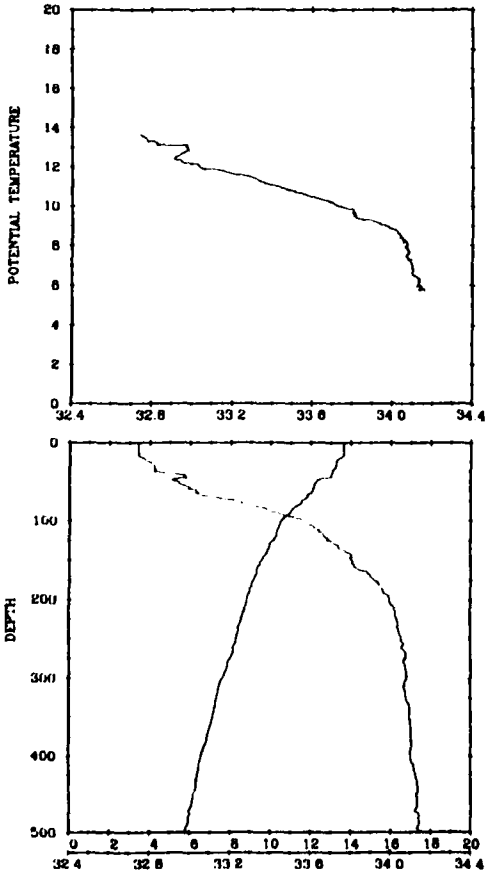

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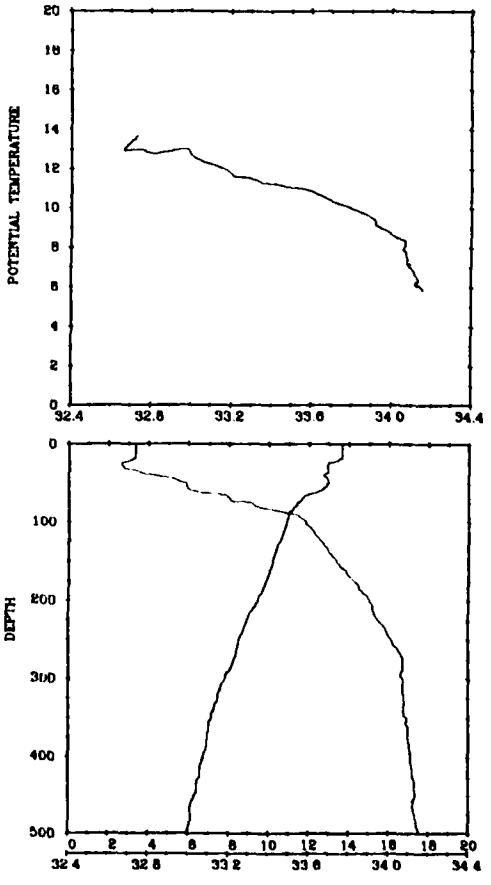

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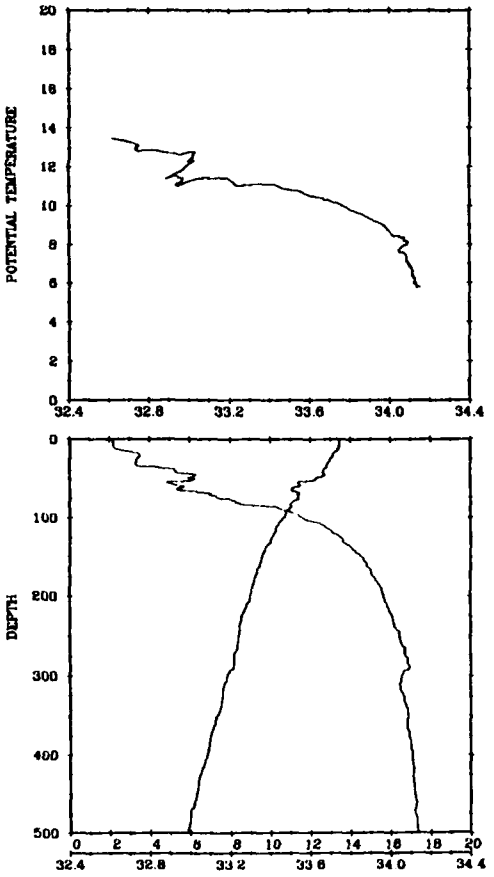

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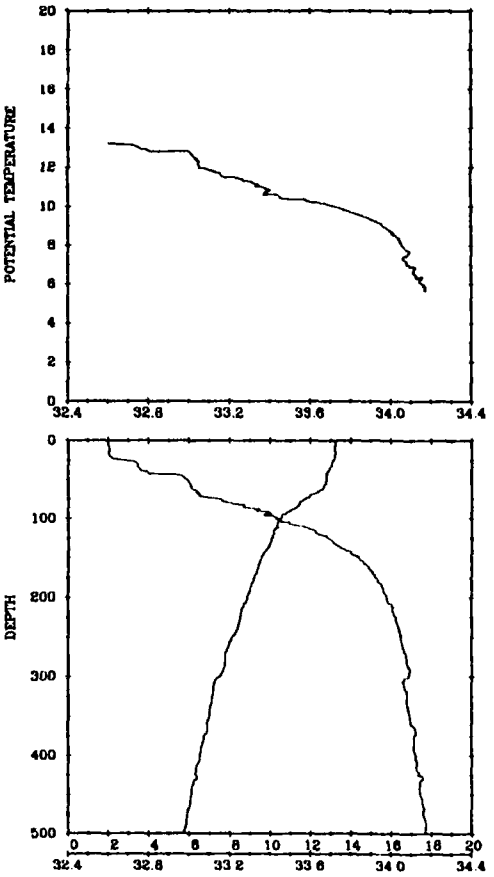

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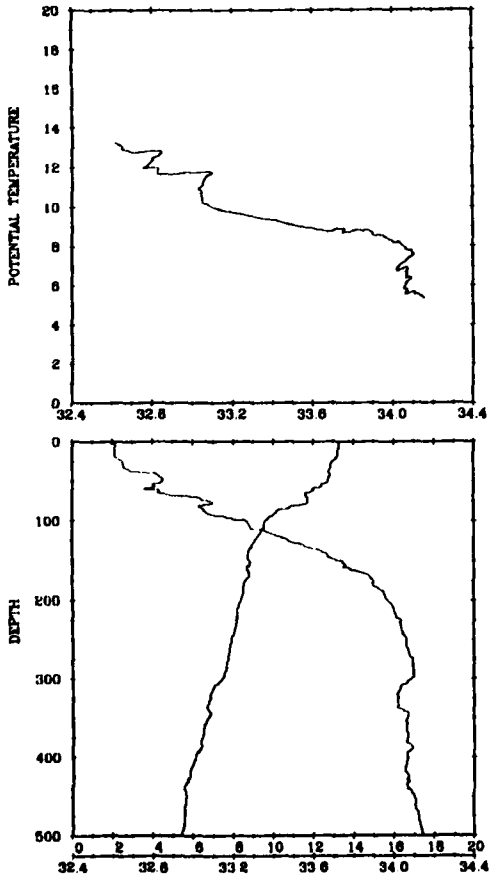

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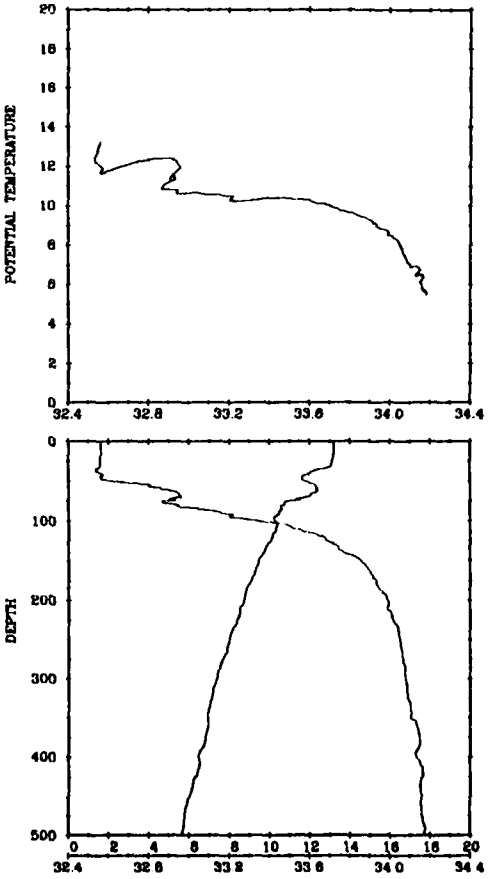
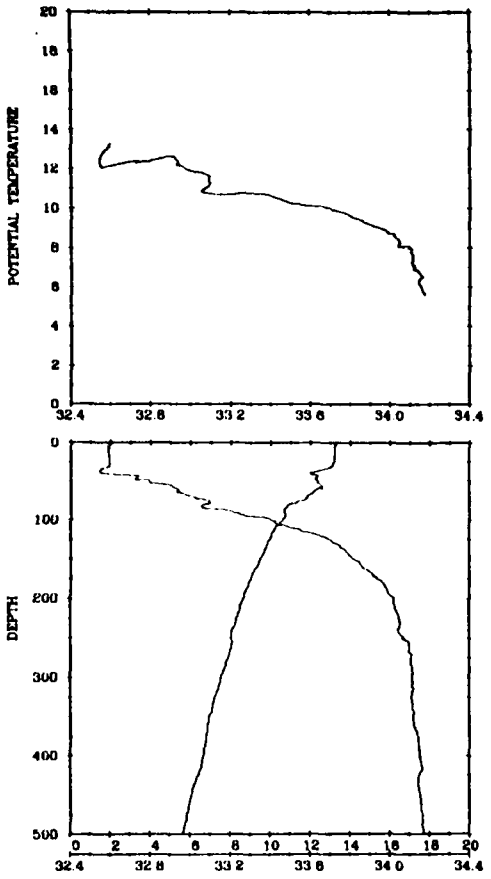


CRUISE SQ87 G 228



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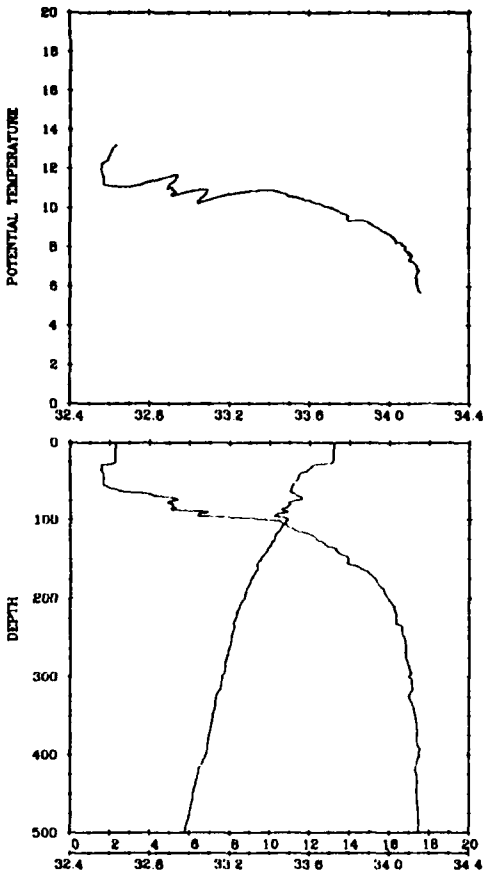

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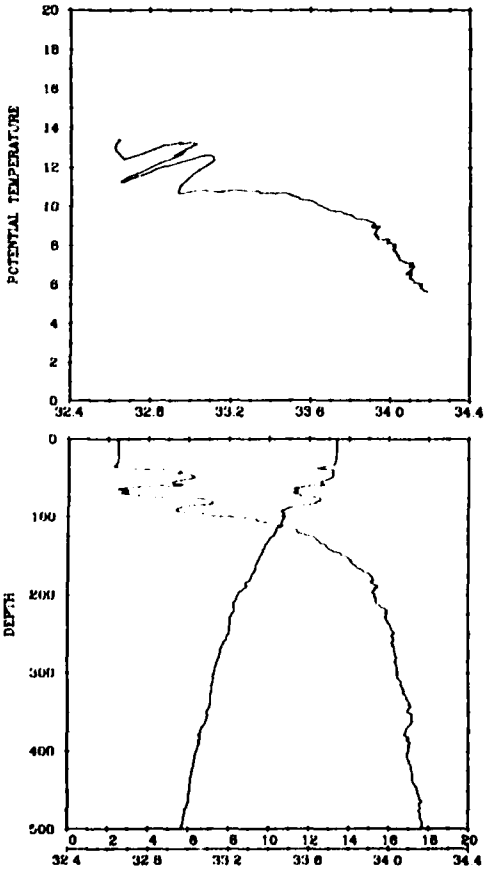

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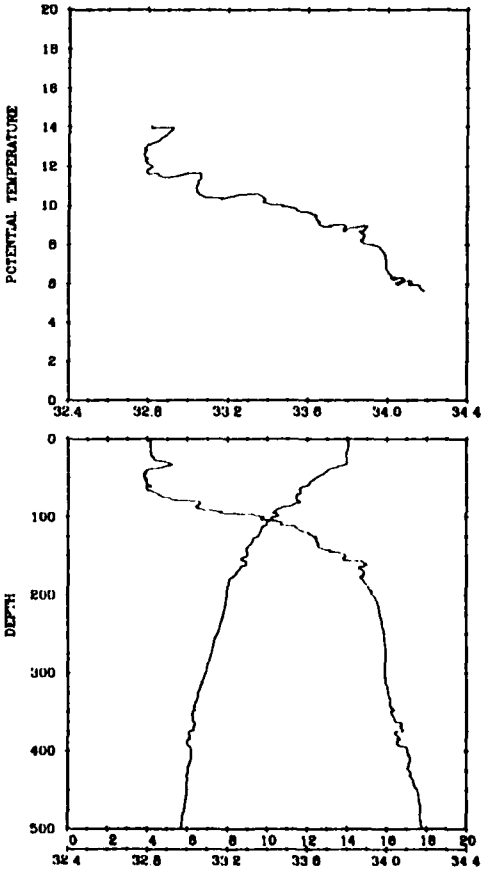

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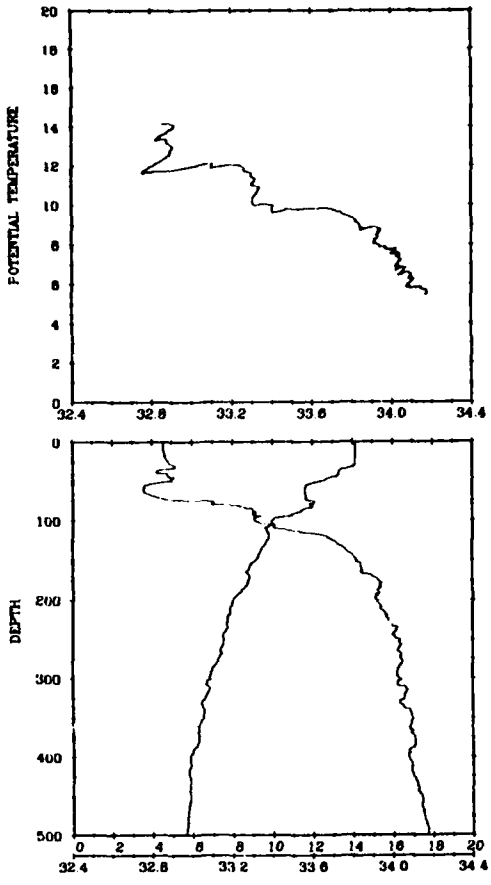

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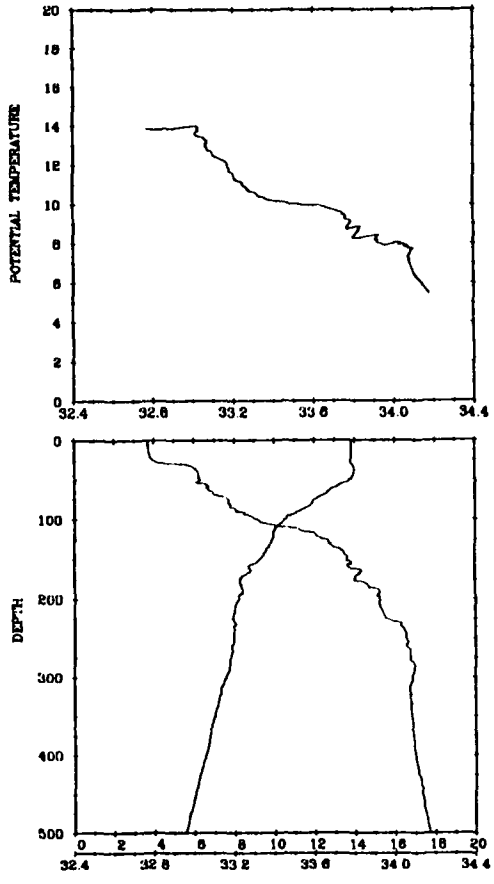

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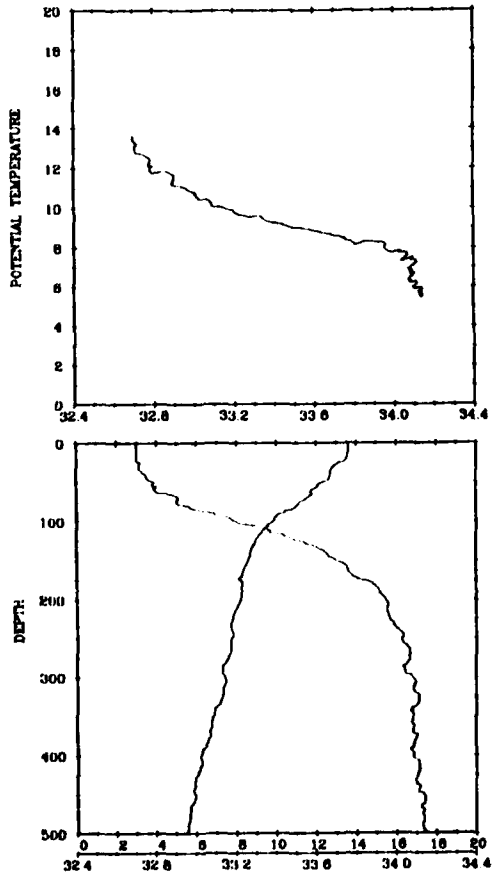

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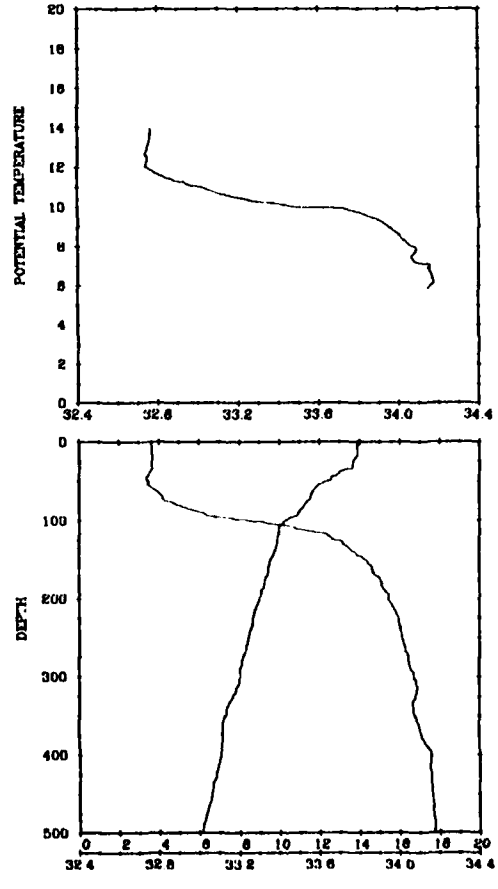
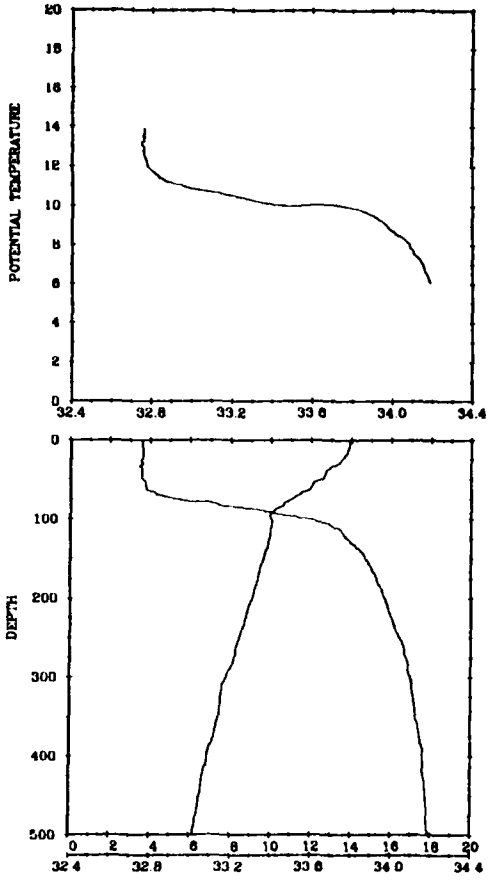


CRUISE SQ87 C 252



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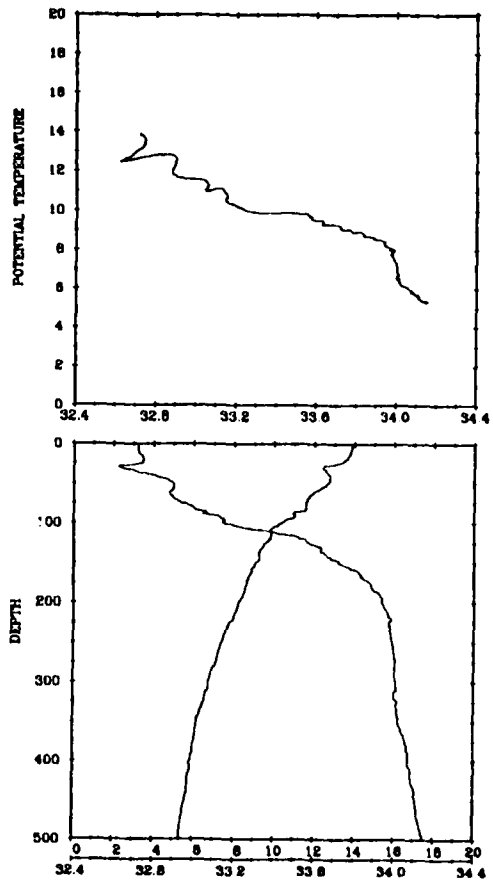

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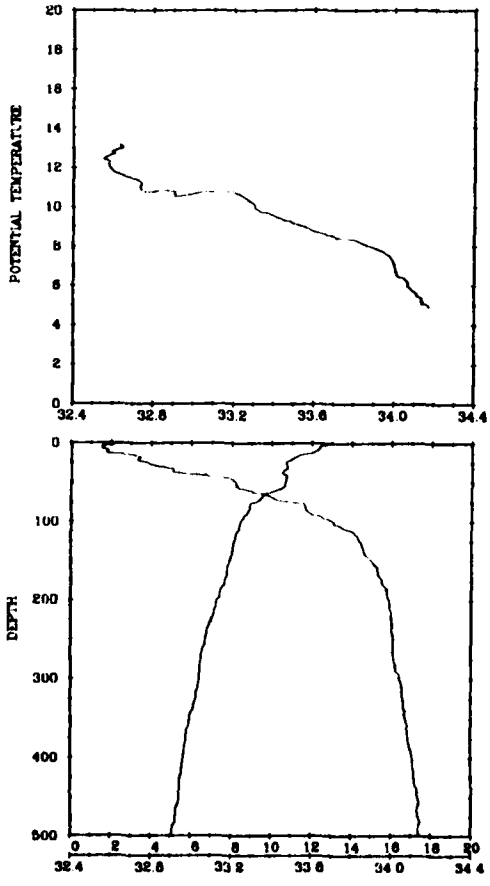

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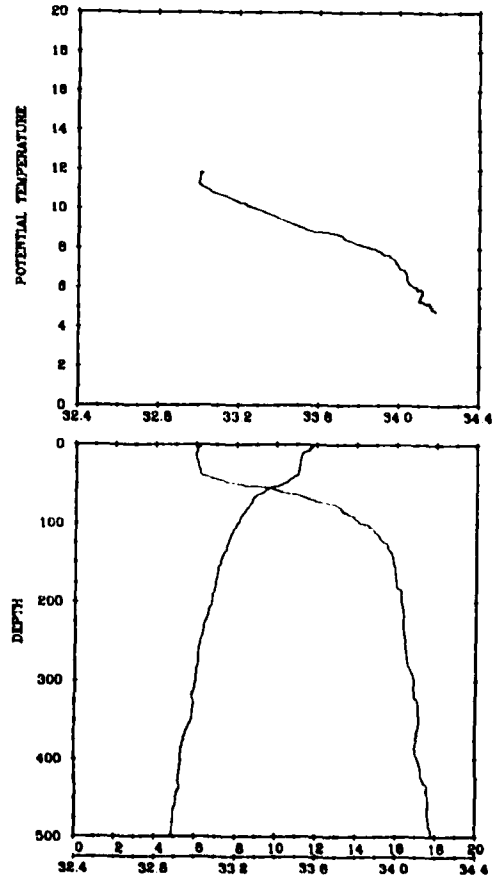

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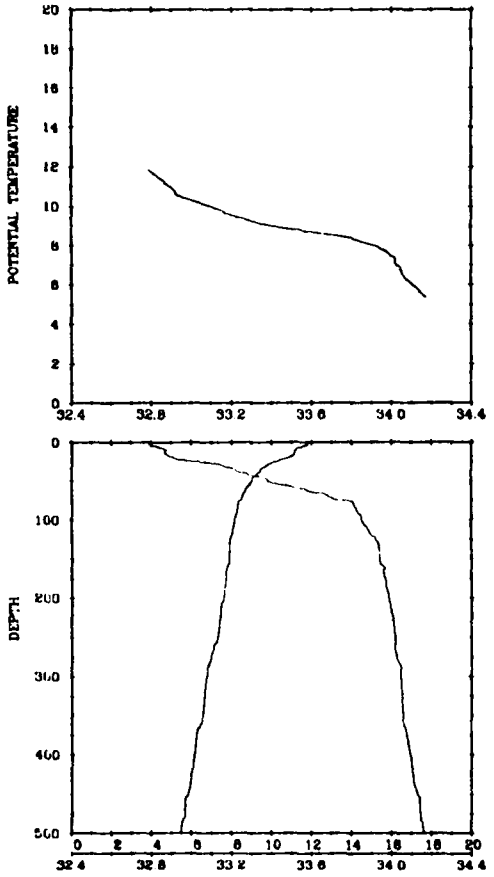

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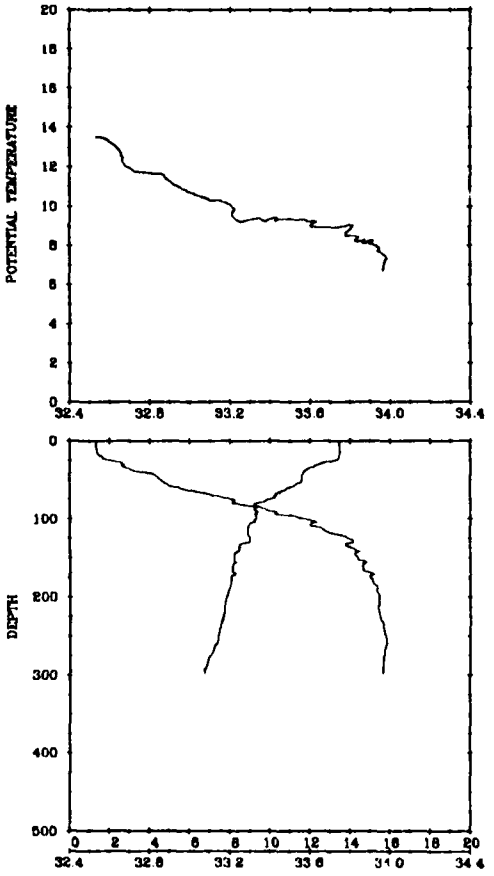

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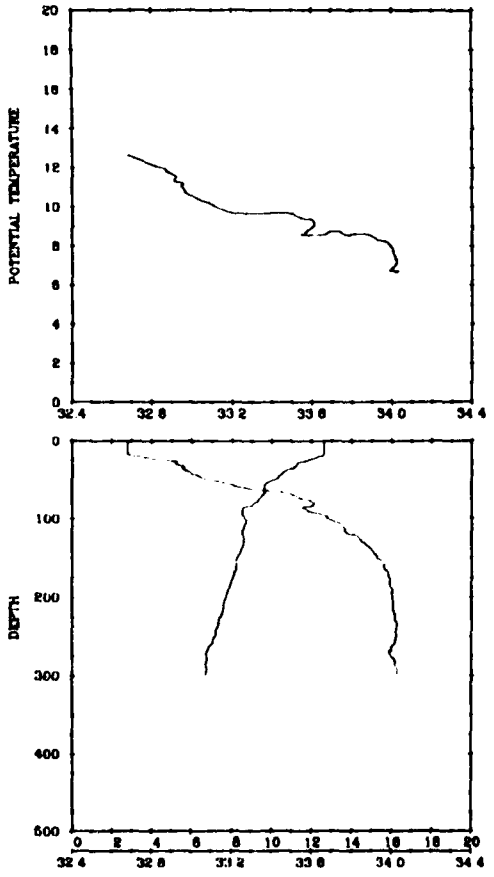

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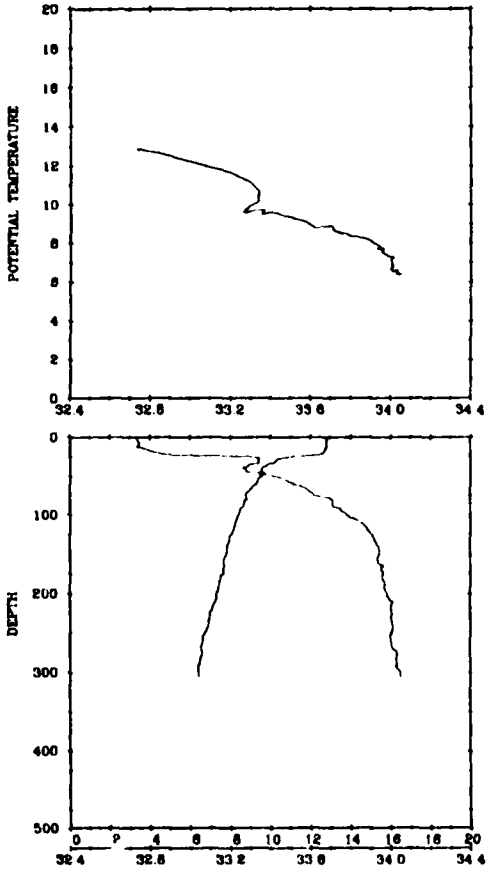

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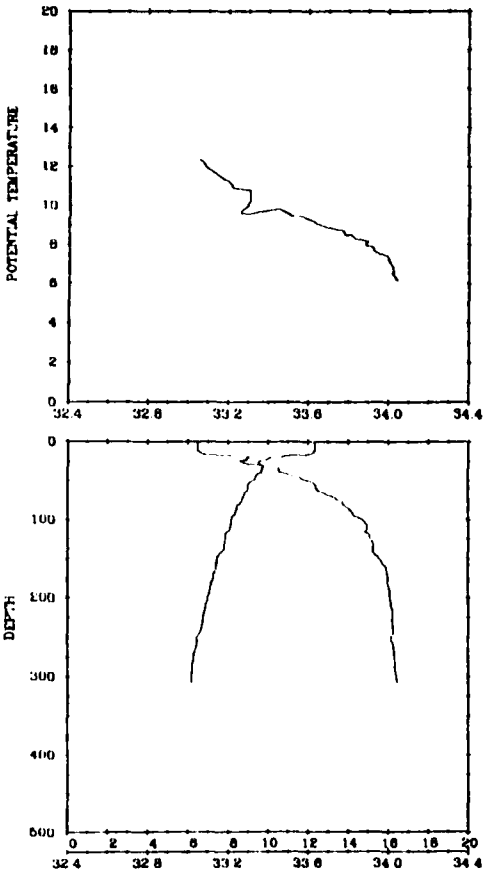

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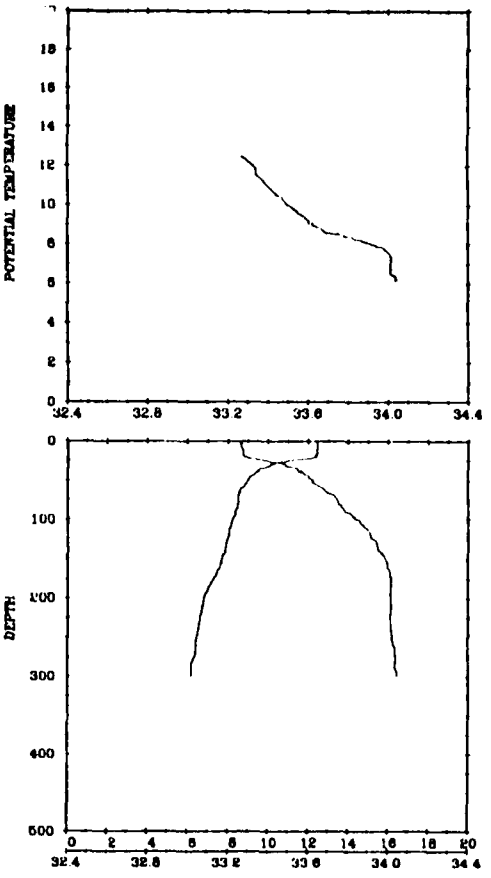

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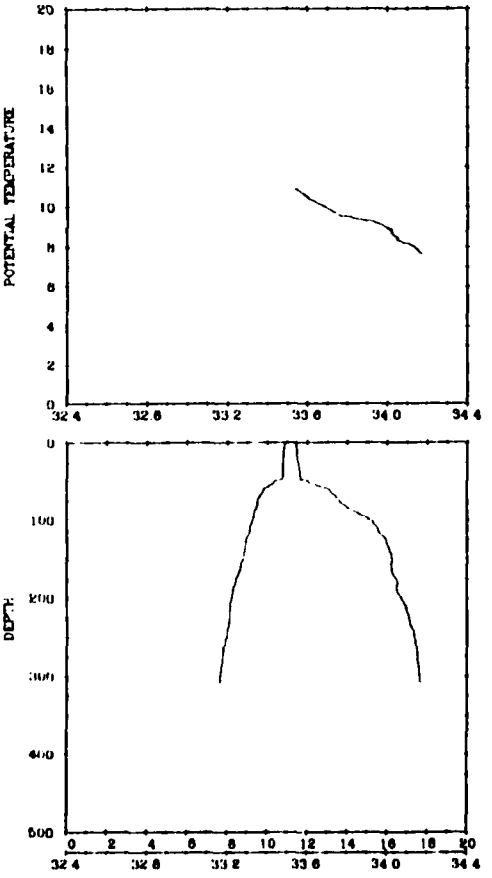

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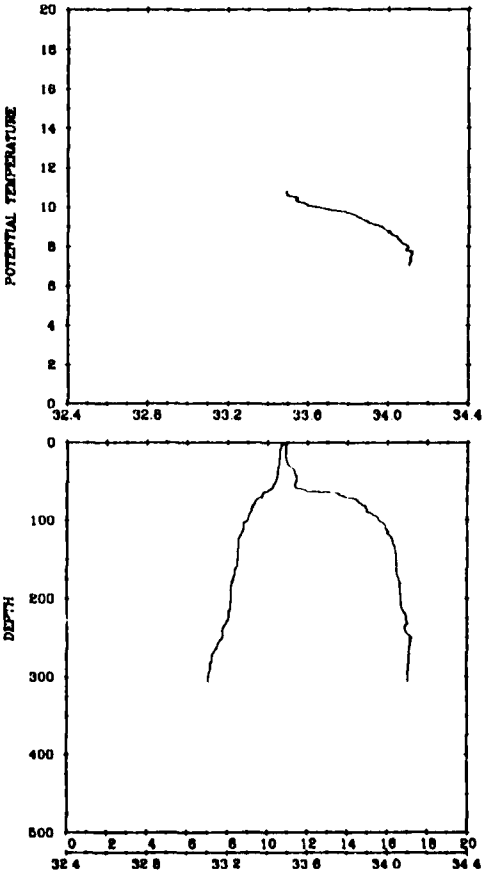

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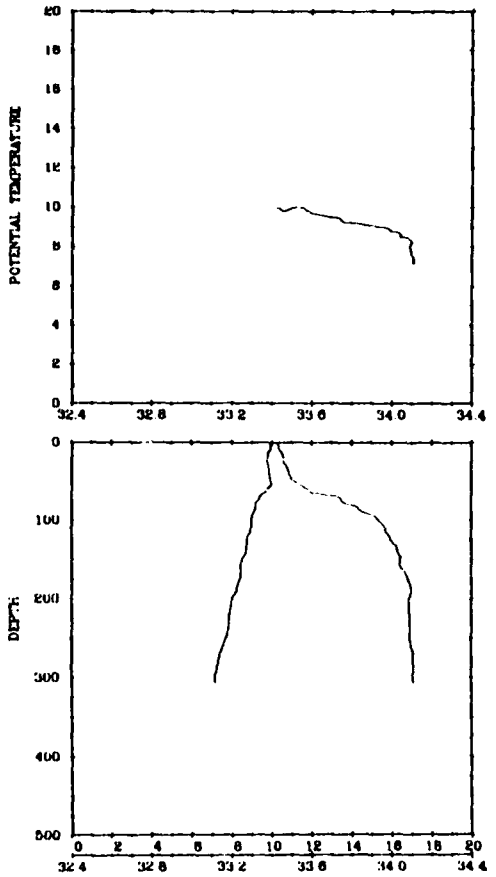

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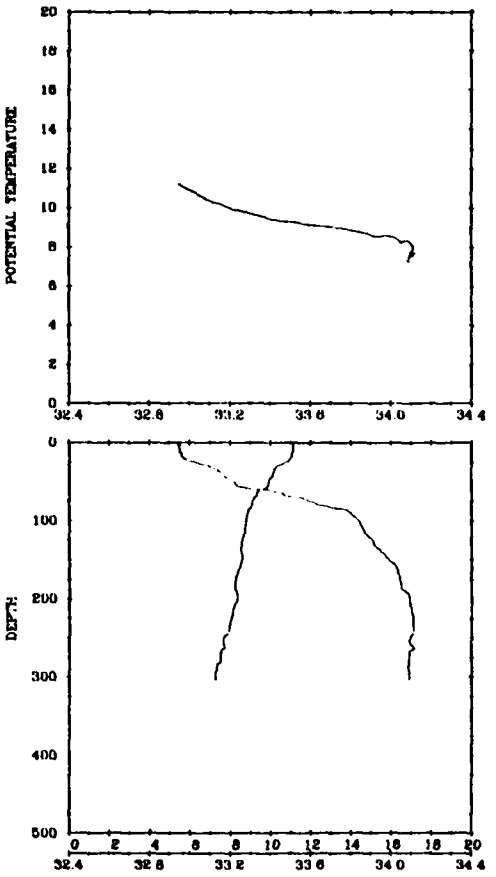

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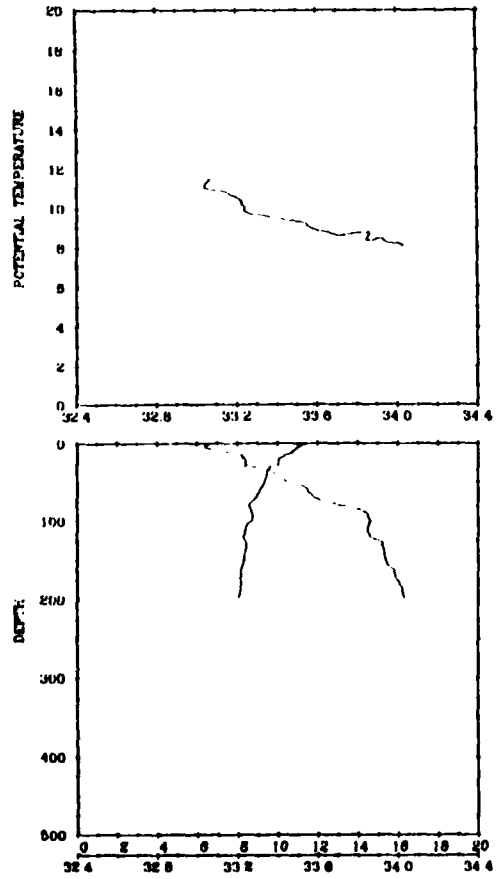

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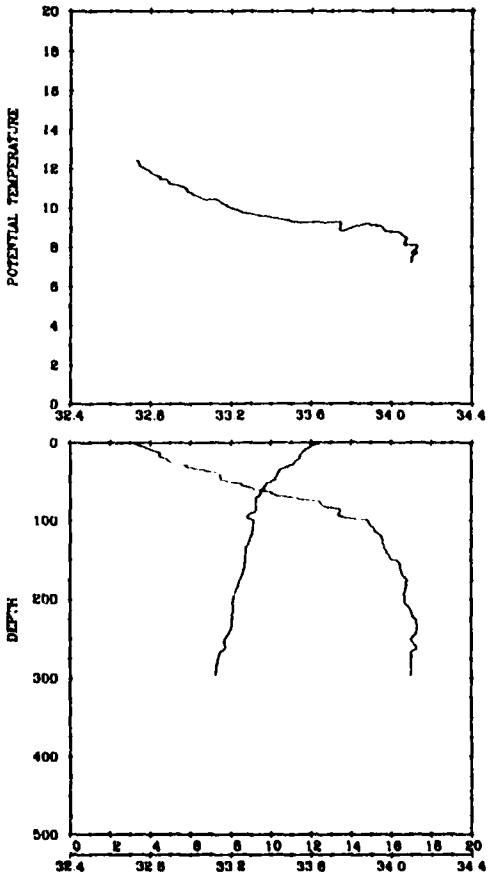

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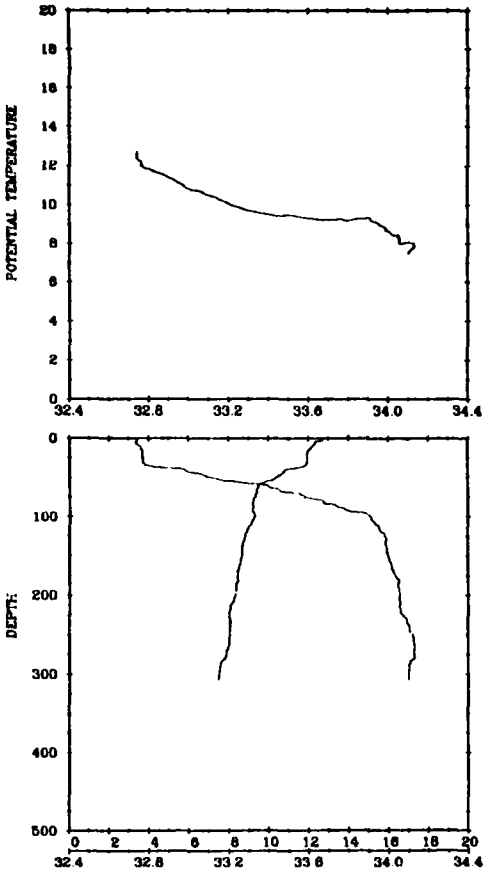

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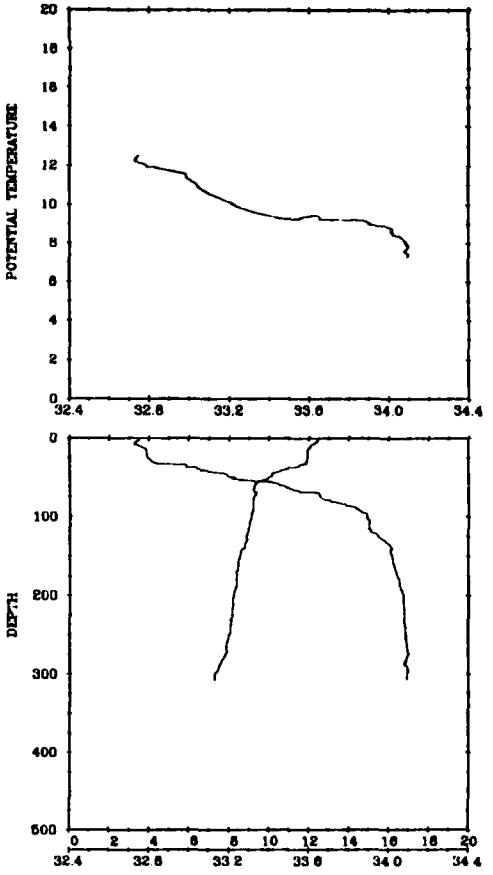

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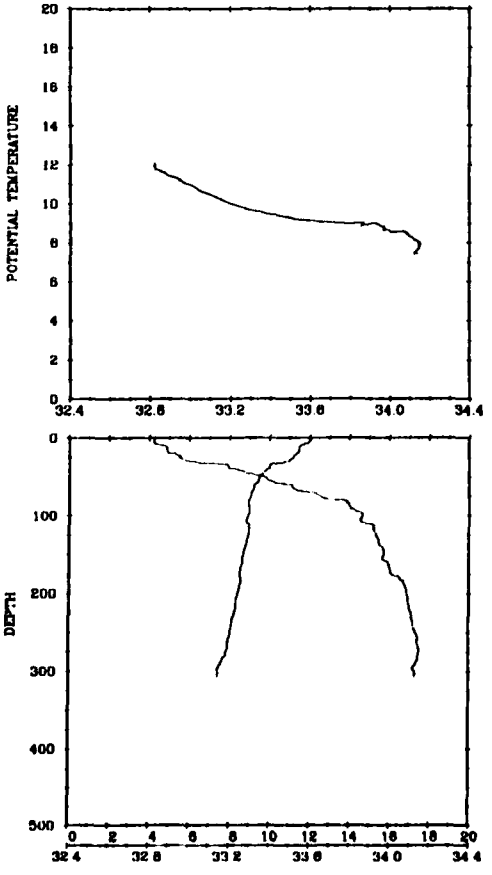

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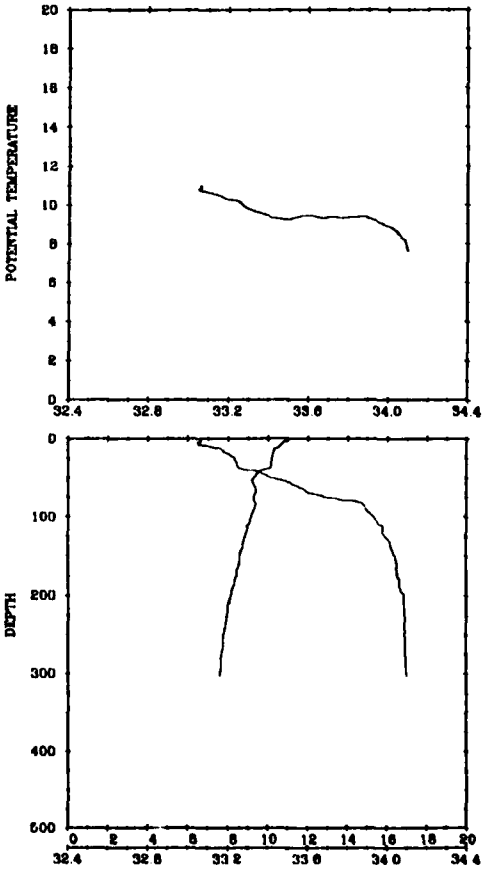

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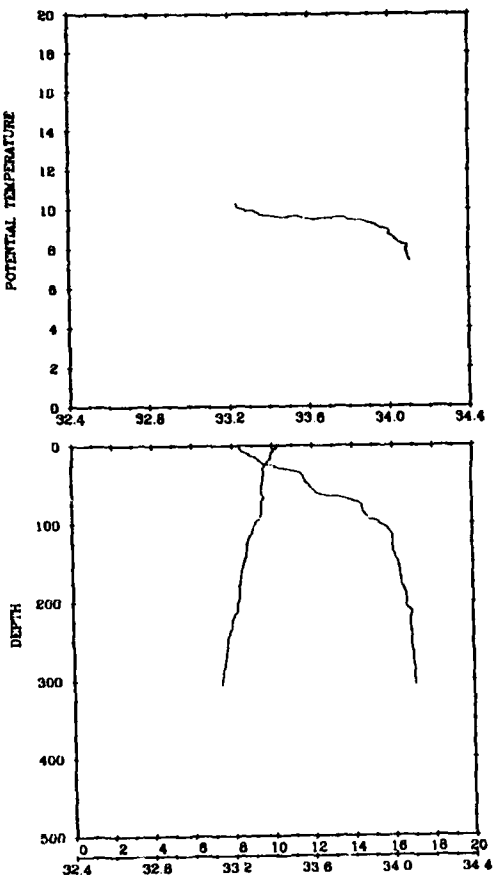

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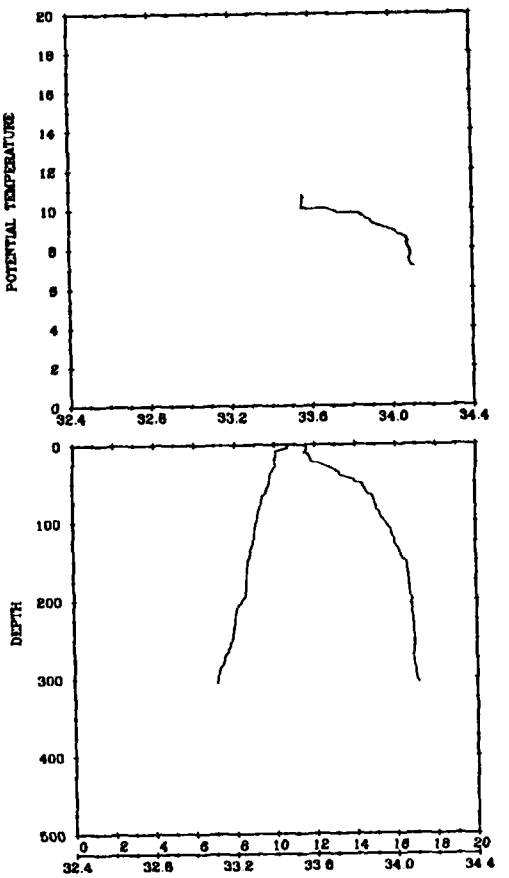

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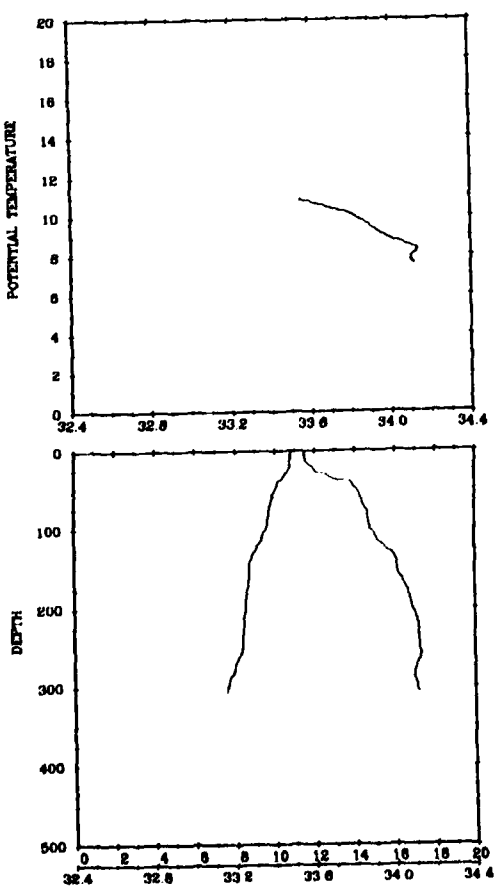

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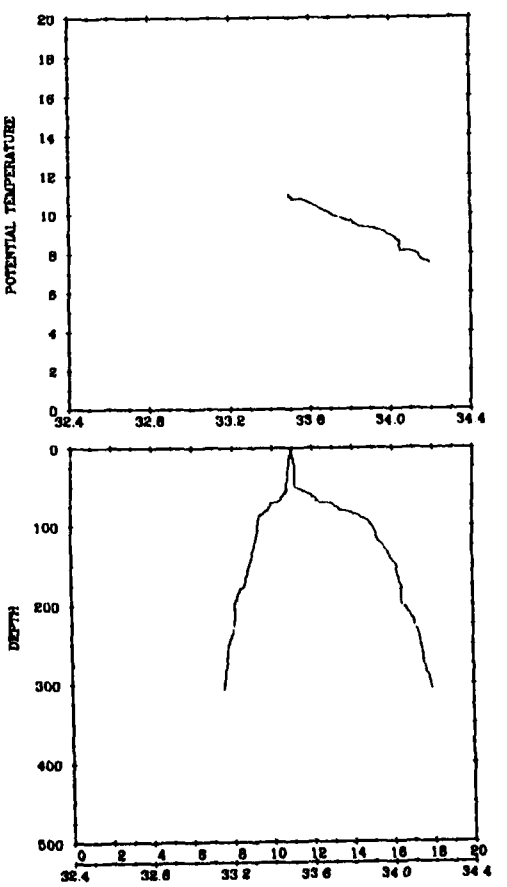

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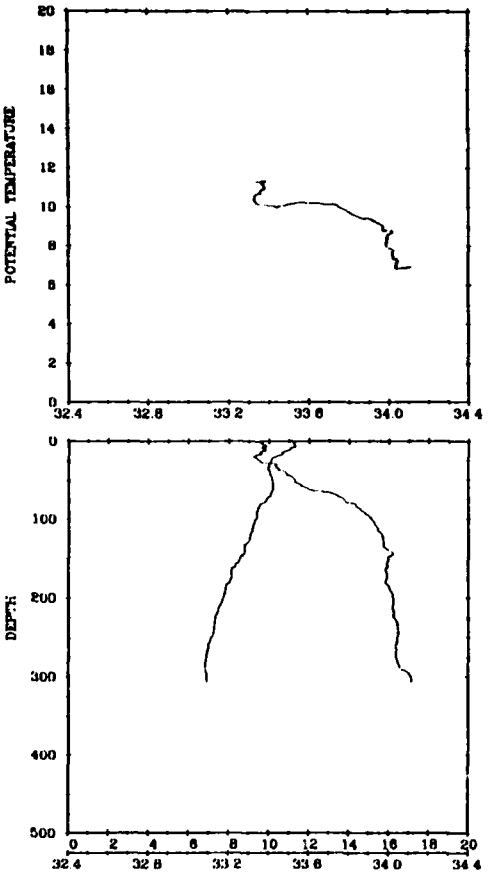

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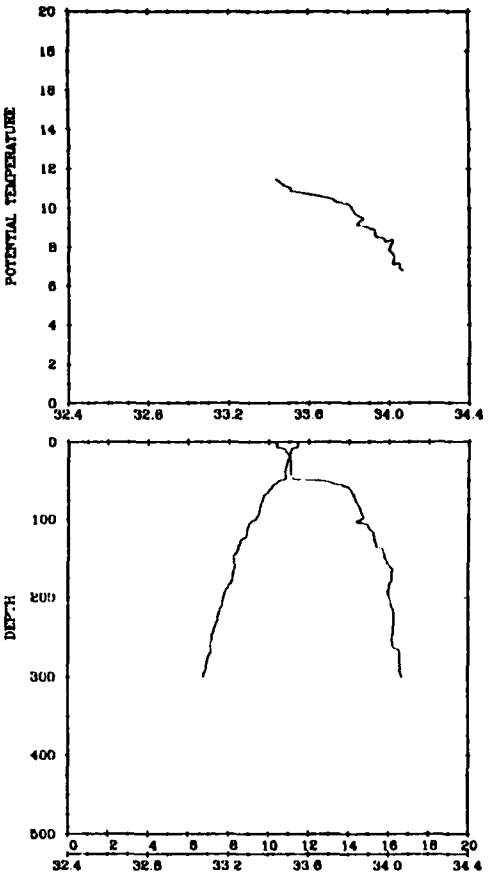

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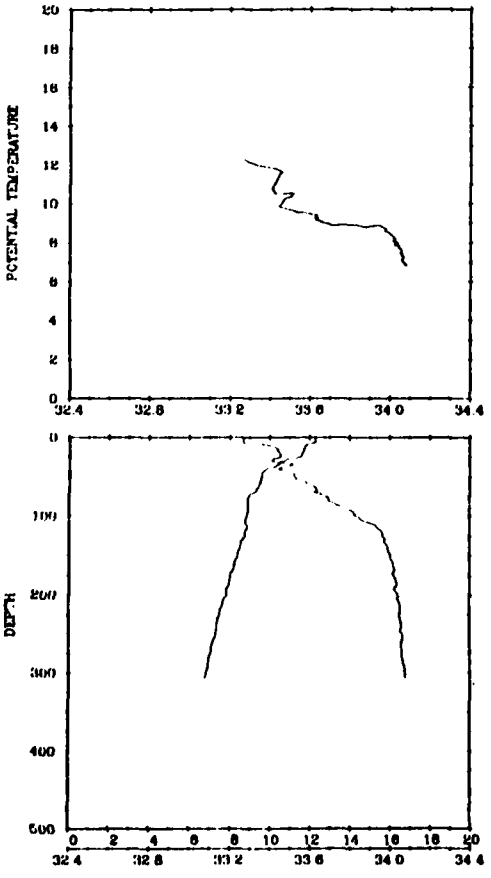

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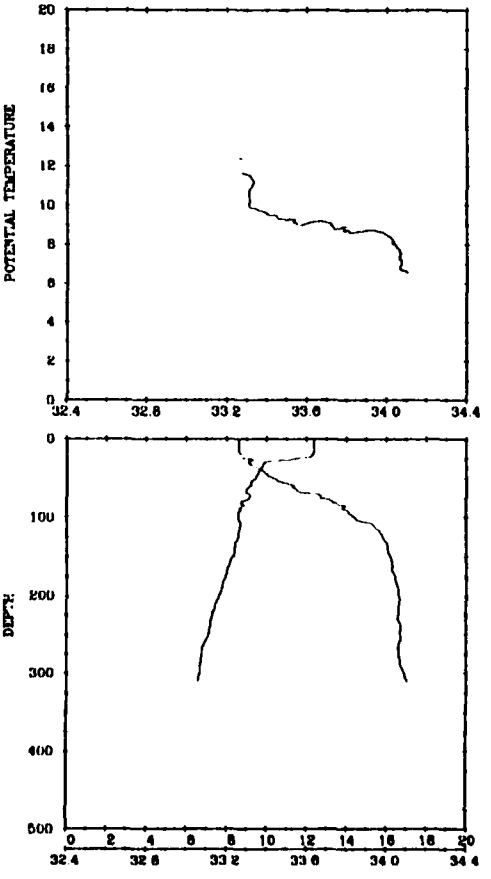

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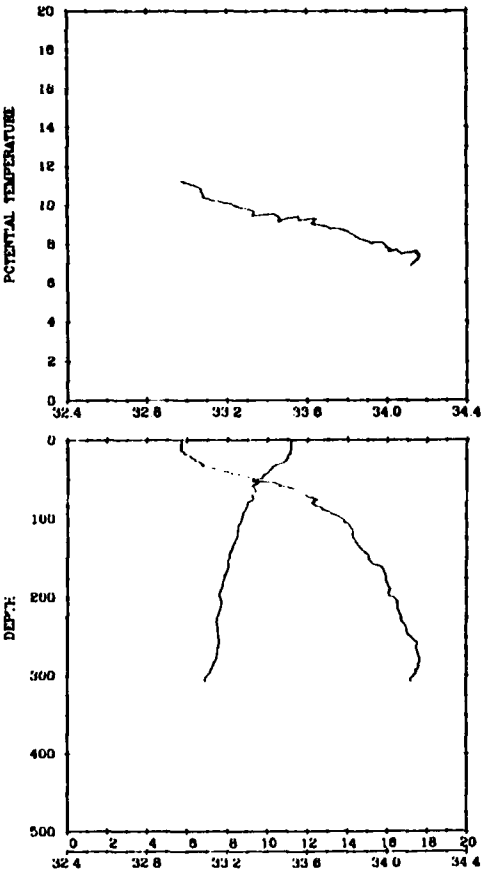

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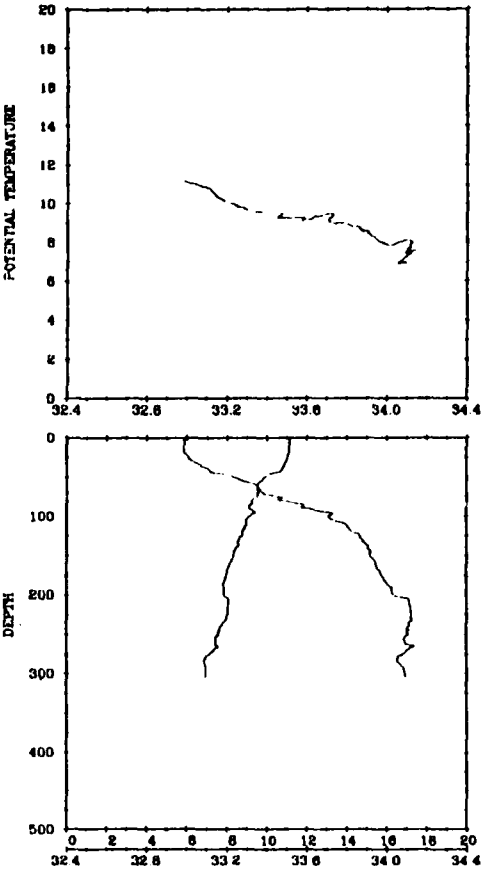

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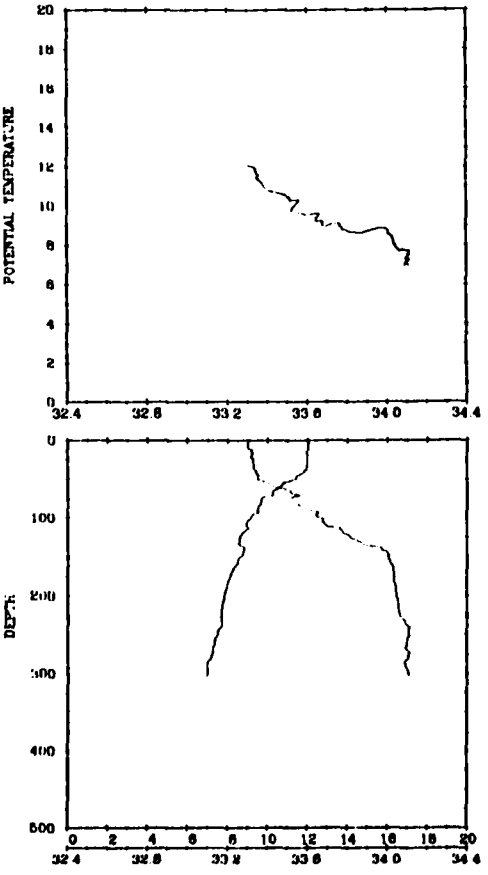

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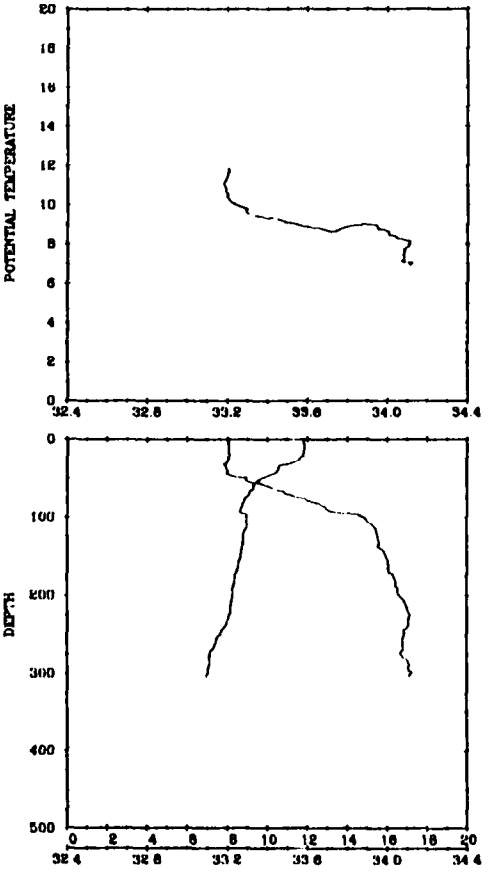

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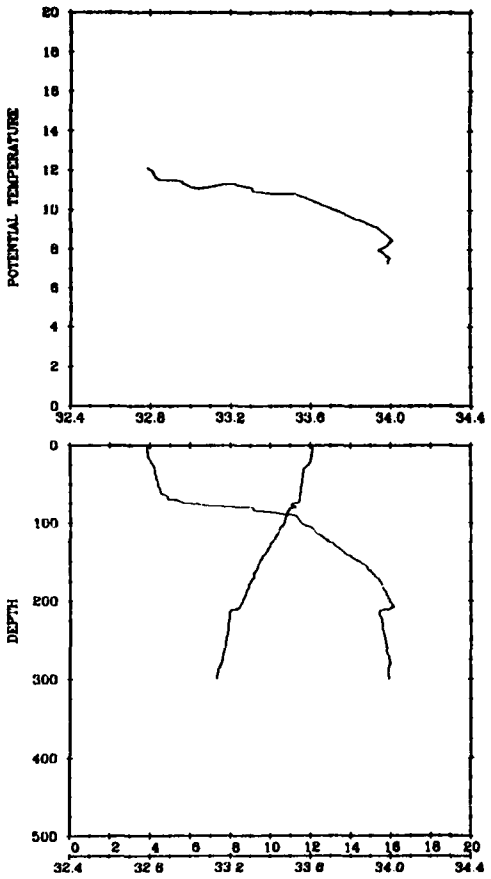

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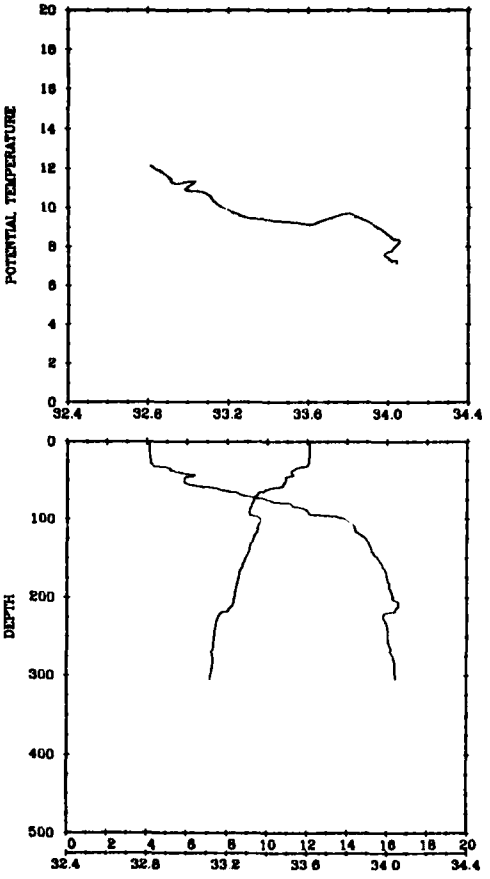

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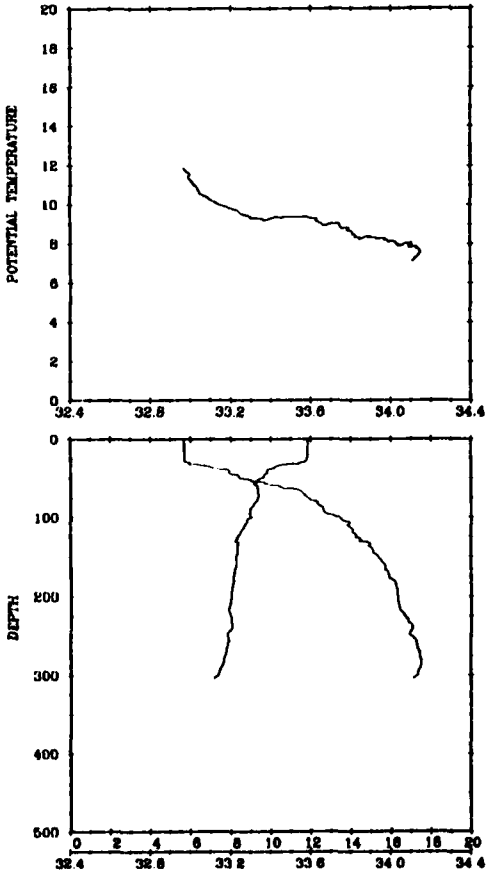

CRUISE SQ87 N 84